An Address

ON

THE SURGERY OF THE STOMACH.

WITH ILLUSTRATIVE CASES.

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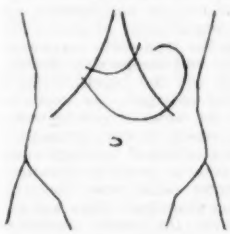
GENTLEMEN,—Of all the invasions which practical surgery has made into the domain of medicine, certainly one of the most important, if not the last encroachment within recent years, has been that upon the stomach. Great, too, as has been the advance in this direction, it must be still owned that we are but on the threshold of a field of labour replete with prospects both hopeful and encouraging. I do not propose to occupy the brief time at my disposal in tracing the origin and development of this comparatively new and interesting departure in surgery, however instructive such an investigation would prove; sufficient will it be if I can give you some concise idea of what at present we are able to accomplish and what we still further hope to do in the not distant future.

Before, however, dealing with the essentially practical side of my subject let me ask your attention for a few minutes while I strive to disperse some of those erroneous impressions which are still illustrated in our anatomical text-books, and, indeed, still linger in the minds of many surgeons, of the true position of the stomach in the abdomen. You will observe by looking at the diagram (see Fig. 1)

FIG. 1.



Erroneously assumed position of the stomach.

FIG. 2.

True position of the stomach.

taken from one of our most popular text-books on anatomy that the stomach is made to assume a transverse position—in other words, the cardiac orifice is only slightly above the pyloric and the long axis of the viscus is almost transverse to the trunk of the body. Now look at this diagram (see Fig. 2) which may be taken as approximately representing the normal disposition of the organ. The lesser curvature, instead of, as in the last diagram, looking upwards, is here seen to be directed mostly towards the right, while about four-fifths or even seven-eighths of the viscus is to the left of the middle line. That this must be the normal position of the stomach in health is sufficiently attested by these facts: first, that the cardiac orifice is situated about opposite to the junction of the seventh costal cartilage with the sternum, and that the pylorus—as I have frequently demonstrated—lies from two to three inches below the ensiform cartilage and from an inch to an inch and a half to the right of the middle line. Hence if you draw a line, curved somewhat to the left, from an inch to the left of the middle line above opposite the junction of the seventh costal cartilage with the sternum to a point about three inches below the ensiform cartilage and an inch to the right of the middle line, you will get a line that is much more vertical than transverse; and, further, if you allow that the stomach rises for about an inch or so above the cardiac orifice to the left you will see how very much of the whole body of the organ occupies the left side of the upper abdominal cavity. That the erroneous transverse disposition of the stomach has so long dominated our minds has doubtless arisen from the position of the organ as found in the dissecting-room and at post-mortem examinations. The relaxation of the diaphragm, together with the general loss of all those supporting influences which exist during life are quite sufficient to explain this altered condition and situation of the stomach. But now that the stomach has come to be an *in situ* object of observation and investigation during life we have learnt to regard it from a new aspect and a more correct one. I should not have deemed it worth while directing your attention so forcibly to this little piece of normal anatomy if I had not observed recently that in two sets of lectures delivered in London by Mr. A. E. J. Barker[1] and Mr. W. H. Bennett[2] respectively the diagrams given to illustrate their remarks were all of the old erroneous type. The stomach in each set of illustrations is made to appear as if it lay transversely across the right hypochondriac, epigastric, and left hypochondriac regions.

If, then, the normal position of the stomach be such as I have described to you it has to be remembered that this position is very materially affected by certain lesions directly or indirectly connected with it. Thus the weight of tumours may drag it downwards: adhesions contracted to other parts may displace it in almost any direction, while obstruction seated at one or other orifice may cause it to become either enormously increased in size and capacity or greatly diminished. Notwithstanding, however, all these changes, the result of disease, there is a value, and that of increasing importance, in a correct knowledge of the normal position of the stomach. For if there is one line more than another in which our desires lie, it is in early exploratory operations where we may hope to treat certain diseased conditions long before they have reached those hopelessly advanced stages with which we are at present only too familiar, and before, therefore, the stomach has been altered in shape or position.

I now pass from these few remarks upon the anatomy of the stomach to consider the various operations which we are prepared to perform upon it. I shall simplify this consideration in the first instance by placing before you a detailed list of these operations so far as they are at present carried out by the operating surgeon. You may take the following list of operations as a fairly comprehensive and complete one: (1) gastrotomy; (2) gastrostomy; (3) gastrorrhaphy or gastroplication; (4) gastrectomy, partial and complete; (5) gastrolysis; (6) gastroplasty; (7) gastro-anastomosis; (8) gastropexy; (9) pylorectomy; (10) pyloroplasty by Heineke's method and by the submucous method; (11) pyloric divulsion from within (Loreta) and from without (Hahn); (12) gastro-duodenostomy; and (13) gastro-jejunostomy, anterior (Woelfler) and posterior (von Haeker). Combined operations: (14) gastro-jejunostomy with jejuno-jejunostomy (Braun); (15) pylorectomy with gastro-jejunostomy; and (16) division of the jejunum with implantation of the distal end into the stomach, and the proximal end into the jejunum. It would carry me far beyond the time at my disposal to enter at any descriptive length into the performance of these various operations, not to speak of the many variations in method of execution which several of them admit. I shall sufficiently reach the ends I have in view by casting comparatively rapidly on to the screen a series of outline sketches which will indicate the essential features of each operation. The principal object for which I strive this evening is to show for what practical ends we propose to employ each operation, or, in other words, what diseases of the stomach we may hope in some instances to alleviate, in others to cure. And, further, I particularly wish to show the results of some of the operations as seen in such patients as I can introduce to you, and in the records of such others as for various good reasons I cannot personally exhibit. I may say in passing that the cases which I bring before you to-night are the result of the last 15 months' personal work in this particular department of surgery, and I include every case upon which I have operated, but time forbids my alluding to many other interesting cases which I have seen. I now take up the first operation, that of

[1] The Clinical Journal, vol. xi., No. 26.
[2] Brit. Med. Jour., 1900, vol. i., p. 241.

EXPLORATORY GASTROTOMY.

You will observe that I have qualified the operation by prefixing the word "exploratory." This I have done purposely because I wish to speak of it more particularly in this connexion. It is when viewed and practised in this aspect that we hope to make considerable advance in the diagnosis and early treatment of such diseases of the stomach as may be obscure and uncertain in their symptoms. Let me indicate briefly some of the conditions the obscurity of which as manifested by the symptoms we may hope to elucidate by an exploratory gastrotomy. First and foremost we have obstructive affections of the pylorus, and in connexion with these the co-existence or not of dilatation of the stomach. We can tell whether the pylorus is contracted; if it is, the extent and nature of the contraction: whether it may possibly be spasmodic or whether it is cicatricial or malignant. We may discover an ulcer which from its proximity to the pylorus probably effects a reflex contraction of the orifice; or we may find, as in a case recently recorded by Mr. Bennett, that a pedunculated tumour caused obstruction by acting like a ball-valve to the opening. Further, we can examine the cardiac orifice, although to do so will necessitate the introduction of the hand within the abdomen, otherwise the exploring finger cannot reach the opening In this examination the finger must be inserted in a direction upwards and inwards—that is to say, towards the middle line. Without this precaution it is likely to mislead by passing to the right into the cardiac dome. We can in this way determine the existence of any contraction of the orifice, and in general derive information of a kind similar to that obtained in the case of the pylorus. And again, we can pretty thoroughly explore the body cavity of the organ either by the finger or by the eye, for by the introduction of the cystoscope we can obtain a fairly good view of the internal lining wall. By either of these means, therefore, we can ascertain the existence of ulcers, tumours, varicose veins, cicatrices, and possibly also any abnormal state of the mucous membrane.

These, then, are positive evidences of disease which we may succeed in detecting. But there is the almost equally valuable evidence of a purely negative kind, where we may hope from the apparent absence of any organic lesion that the condition is probably a purely functional one and that sooner or later the patient may be led to expect relief from the employment of simple therapeutic measures.

Not only, however, from the diagnostic aspect may this operation be considered of value. There is the question of treatment. Through this same incision we can dilate a contracted pyloric or cardiac orifice; we can cauterise a bleeding ulcer, as has been successfully accomplished in two cases by Küster; we can curette a focus of malignant disease, if we please, as done by Bernays. But, above all that I have said, there is afforded by this operation the invaluable possibility that early knowledge acquired of the existence of some localised malignant focus may admit of its complete and perfect removal with the result of permanent cure.

I cannot, perhaps, gentlemen, better illustrate the value of these remarks, and attach that force to them which I am anxious to, than by describing in the briefest possible way two cases that recently came under my observation and operative treatment. In the one case the patient, who possessed the means to adopt any and every measure proposed to him, had within the 18 months prior to operation travelled for his health. He had been an inmate of a Weir-Mitchell home where he was stuffed in the most vigorous and approved fashion, vomiting and stuffing alternately. He had seen several medical men and of course had consumed an indefinite quantity of physic. At last the discovery was made of a tumour in the epigastrium, not, however, until it was too late for removal, but still admitting of the patient being greatly relieved by a gastro-jejunostomy. The other case was that of a man whose life had for many years been one of hopeless uselessness and wretchedness. Twice he had been an inmate of two of the largest infirmaries in the country where in each instance for several weeks systematic lavage had been practised, leaving each institution of course temporarily improved but as far off as ever from any permanent relief, simply because his pylorus was organically contracted by the cicatrix of an old healed ulcer. Well, gentlemen, I need not multiply instances. The story I have told of these two patients is, as you well know, the story of hundreds of others who with some organic obstruction of the pylorus are being lavaged, physicked, and ordered change of air and scene when such a simple and safe measure as that which I am at present advocating would have led to the adoption of measures which in several instances would have afforded relief and in many effected a cure. Before showing you the case I wish to in connexion with this operation, let me make one confession with regard to it, and that is that its very necessity reflects in no small degree upon our at present defective powers of diagnosis. That we should be driven to see or to feel the disease is a confession that we cannot yet read aright the symptoms that it presents. What we still want, and what it is to be hoped we shall yet obtain, is some reliable and distinctive differentiation between the various symptoms connected with the initial stages of disease. Until, however, we gain this requisite knowledge we ought not, I consider, to deprive our patients of the valuable information to be derived by the early performance of exploratory gastrotomy. This is the case I wish to show you. It is only one of three or four others in which I have performed this operation, and the only one in which nothing further was done.

CASE 1. *Extensive adhesions of the stomach and colon to a collapsed and shrunken gall-bladder; exploratory gastrotomy and colotomy; recovery.*—A man, aged 52 years, a patient of Dr. J. G. Wilson of Pollokshields, with whom I saw him in consultation, was admitted to the Victoria Infirmary, on Sept. 12th, 1899. He attributed his complaint to an accident which he had met with 22 years ago, when he was violently struck over the lower ribs on the right side with a stick. This was immediately followed by severe pain at the seat of the injury, which continued for several weeks and incapacitated him for his work. Since that time he had been subject to attacks of epigastric pain of a "grasping and tearing" character occurring at varying intervals of a few weeks or a few months. When the attack was at all severe it would be accompanied by vomiting. An attack which he had a year ago was followed by severe jaundice which lasted for three weeks. On examination of the patient there was nothing either in his general condition or in the locality of the stomach to call for notice, excepting that percussion revealed an unusually high area of gastric resonance on the right side. On Sept. 23rd, the abdomen was opened in the middle line above the umbilicus. As the disease, however, was discovered in the region of the gall-bladder it was found necessary to enlarge the opening by an incision transversely to the right. On digitally examining this part it was found that the gall-bladder had become, or was replaced by, a shrunken indurated mass of cicatricial tissue involving in the matted area the immediate surrounding hepatic tissue and puckering up and inseparably attaching the pyloric end of the stomach and the hepatic flexure of the colon. The stomach was not enlarged. An exploratory incision was made through the anterior gastric wall. The pylorus, while drawn upwards, was in no way contracted, nor was there any diminution in the calibre of the duodenum for two inches beyond. No indication of previous ulceration could be detected. The transverse colon was similarly opened and the hepatic flexure was examined; there was no constriction, but directly opposite the most markedly indurated mass a slight indentation was felt suggestive of the healing of an opening through which a gall-stone might have passed. As the extensive general matting of parts forbade any attempt at their separation, and as no obstruction was detected anywhere, it was not deemed advisable to prolong further the operation by such a measure as gastro-jejunostomy, it being considered advisable to perform this subsequently should the symptoms still remain unrelieved. The patient made an uninterrupted recovery and left the infirmary eight weeks after for the convalescent home. After four weeks' residence there he returned to state that he had gained 10 lb. in weight, was taking his food well, was entirely free from, and had never felt any of, his old pain. The wound was perfectly sound with no sign of giving. As you see him this evening he is still well, free from all his old sufferings, at his work, and taking his food well. It is just five months since the operation.

GASTROSTOMY.

The next operation on my list is that of gastrostomy. It is not usual to introduce this operation when dealing with diseases of the stomach, inasmuch as its performance is almost always for obstruction in the œsophagus. The manner, however, in which I am dealing with my subject to-night necessitates that I should allude to it. It will only be in the briefest possible way. I have performed the operation by the

Kaden-Senn method (which I showed you on the screen just now) four times. It has, I think, some advantage over Frank's method although I consider this also very good. I have never seen any leakage from the gastric fistula, and that is, as you know, the principal practical object we have in view in selecting any particular method. The operation can be performed very rapidly and in the case which I show you [the patient was shown] it only took 15 minutes from the first incision in the abdominal parietes to the completion of the operation. I have operated upon two cases within the period of 15 months from which I am selecting my cases for this evening.

GASTRORRHAPHY.

The next operation on my list is that of gastrorrhaphy, and upon that I have some little to say. The operation, as I have already indicated, is one which consists in lessening the size of an unduly dilated stomach by folding in, to a variable extent, the anterior wall of the viscus. It is now not infrequently used, also, for those cases of perforated gastric ulcer where, it not being possible to excise, the ulcer is doubled in and the healthy wall is folded over and secured by simple suture. In this latter connexion I will show you a case of perforated gastric ulcer so treated, before I pass on to the more extended application of the operation in dilated stomach. [The patient was shown.]

In considering now the treatment of dilated stomach it must be well recognised in the first instance that a chronic dilatation of the viscus is merely a symptom. It probably most frequently is the result of obstruction, either of an organic or spasmodic character, of the pylorus, but if we are to believe physicians we must accept also that it occasionally results from a chronic gastric catarrh. Further, difficult as it may be to explain, we occasionally find that the stomach is dilated as the result of a moveable right kidney or of some other moveable mass within the abdomen. Adhesions or any other influences that may interfere with the normal contractile power of the viscus may lead to dilatation. Instances of such extraneous influences as umbilical hernia, ovarian disease, and appendicitis (Bennett) have been recorded as associated with, if not the cause of, dilatation. It therefore seems just to conclude that to speak of a stomach as being "idiopathically" dilated is only a rather concise and euphemistic way of expressing our ignorance of the true cause of the dilatation where such in every probability exists.

What I wish to bring out in these preliminary remarks is that as surgeons we have no right simply to lessen the size of a dilated stomach without fully appreciating that there probably exists a cause the removal of which we should in the first place seek to effect. But suppose we have discovered our cause and efficiently dealt with it, have we any right to proceed further and to deal in this proposed mechanical way with the enlarged stomach? I most emphatically believe we have, only with certain qualifications and restrictions. The stomach is a hollow and muscular viscus, and it is reasonable to assume that like other similar viscera it will be subject to changes such as we are more familiar with in them; thus it will undergo hypertrophy and dilatation up to a certain extent when there is obstruction to the outflow of its contents; also if this obstruction persists for any length of time, hypertrophy will give way to atrophy and increased atonic dilatation. On the other hand, if the obstruction be removed before the limit of muscular endurance has been reached we may hope for what we could not otherwise expect if the limit were passed, that the organ will commence to regain its original dimensions. If, therefore, we have just reason to believe that the stomach will not recontract I think the operation of gastrorrhaphy a very proper one to perform.

There is another class of cases—that, for instance, which I have said we somewhat ignorantly designate as "idiopathic," that is to say, where we have dilatation of the stomach and cannot assign any explicable cause, certainly not an obstructive one. Here I think there are reasons why we should in certain cases deal surgically with them in the way at present being discussed. For we have to acknowledge that though dilatation may be a symptom of some other affection it can become itself a source of distressing and even grave troubles. Thus a stomach which has lost to some extent its contractile power and is wanting in digestive tone will permit of fermentative changes, and these of themselves will become a source of numerous troublesome dyspeptic symptoms. But there is yet another condition more serious than any yet referred to—that of gastric tetany, a disease which, as you know, frequently runs a fatal course. What is the association between this serious complication and dilatation is not definitely known, but if it be due to the absorption into the system of some strychnine-like substance the result of fermentation there is the possibility that the operation of gastrorrhaphy may prevent its appearance.

So then, gentlemen, I take the position of maintaining that this operation is a justifiable one when executed with all due consideration for the special points which I have raised. You may call it "a very unscientific and undesirable proceeding," to quote words recently used by Mr. Barker, if you like; but some strikingly successful cases have been recorded and I am able to introduce two to you this evening, where I think you will be bound to confess that benefit has been derived. I have particular pleasure in showing you the first case because it is just about 15 months since I did the operation, and the improvement experienced shortly after has been maintained since. The case has already been published in THE LANCET,[3] where it has been more fully discussed than I have time to do this evening. I will, however, give you briefly a report of it.

CASE 2. *Exploratory gastrotomy and gastrorrhaphy for dilatation; recovery.*—A man, aged 56 years, was admitted into the Victoria Infirmary on Nov. 9th, 1898, suffering from obscure gastric symptoms. On Nov. 18th the abdomen was opened and its contents were explored, but with the exception of the dilated stomach nothing abnormal was detected. An exploratory incision was then made into the stomach and the index finger was introduced, but neither at the pylorus nor elsewhere was there any apparent disease. This wound was closed and then a long fold of the anterior wall was tucked in and secured by an interrupted series of Lembert sutures, thus approximating the two curvatures. The symptoms all gradually subsided. Four months later the patient's weight had increased by two stones and when seen on Jan. 30th, 1900, his statement was that he had been taking his food "real well" with none of his old pain or discomfort, and that he had enjoyed very good health and was travelling in the tea trade. His one complaint is the weakness in the old cicatrix.

Of course, with this case I am quite prepared to acknowledge that 15 months is not yet a long enough time to permit one to say whether in lessening the size of the enlarged stomach permanent relief has been effected. All that can be allowed is that up to this period he seems to have benefited.[4] The next case puzzled me in the same way in my inability to discover any explicable cause for the dilatation. I explored by an incision as in the last case but with a negative result. The following is a brief abstract of the report of the case.

CASE 3. *Exploratory gastrotomy and gastrorrhaphy for dilatation; recovery.*—The patient, a woman, aged 64 years, was seen by me in consultation with Dr. Donald Macleod of Glasgow on May 9th, 1899. For about five years she had been troubled with intermittent attacks of griping pain in the stomach and with other obscure gastric symptoms. On May 19th the abdomen was opened by a median incision. A systematic examination was first made of the stomach, the duodenum, the small intestine, and the colon and rectum, also of the gall-bladder and ducts, the kidneys, and the liver, but nothing abnormal was detected with the exception of the dilatation of the stomach. An incision was then made through the anterior gastric wall and the index finger was introduced. No apparent obstruction at the pylorus existed, nor so far as the finger could detect was there anything abnormal within the stomach. The exploratory incision was then closed and the size of the stomach was diminished by tucking in a fold of the anterior wall. This was secured in position by a series of interrupted Lembert sutures approximating the greater and lesser curvatures. The patient left the infirmary five weeks after the operation free from all her old pain and trouble and able to take ordinary diet with no pain or discomfort. In response to my request Dr. Donald Macleod has inquired into the present state of the patient, who lives in the Highlands. On Feb. 16th last he kindly sent me a letter which he enclosed in his own, saying, "You will be as pleased as I am in reading it." To quote the words of the report, "The stomach has given her *no trouble whatever*, she is putting on flesh, takes her food very well, and everything agrees with her." This is the report eight and a half months after the operation.

[3] THE LANCET, April 8th, 1899, p. 962.

[4] When recently seen he was still perfectly well, that is, 22 months after the operation.

GASTRECTOMY.

I now ask your attention to the operation of gastrectomy. I do not intend to enter at any length into the steps of the operation either in its partial or complete form. A few words, however, on the "complete" operation and its results in view of the comparative novelty of the procedure will not be out of place. The entire stomach has now been successfully removed some half-a-dozen times and with the remarkable result that not only have the patients been relieved of much suffering but they have really been none the worse through the loss of an organ which, it has been assumed, fulfils such an important rôle in the function of digestion. Schlatter's remarkable case, which was so elaborately investigated for a lengthened period after the operation by expert physiologists and chemists, tended to show that the nutritive and metabolic processes of the system were but very slightly interfered with; indeed, all that was required for necessary digestion and absorption seemed to be efficiently carried out by the intestines. It may, therefore, be that we shall have to re-construct our theories on the hitherto supposed principal functions of the stomach and attach more importance to its rôle as a storage receptacle for the gradual and continuous discharge of nutrient material into the intestine, while at the same time it allows of the convenient intermittent ingestion of food.

As regards the practical part of the operation it will only be in exceptional cases that it will be found possible to unite the divided duodenum to the cut end of the œsophagus, as was successfully accomplished by Childs-Macdonald of San Francisco with Murphy's button. In most instances the œsophagus must be implanted into a loop of the jejunum, as in Schlatter's case. I have tried several times on the cadaver to approximate the duodenum to the gullet, and in the healthy state of the parts it is certainly rarely possible. The perpetual dragging effect, however, of a stomach weighty from its involvement in tumour growth tends to give a laxity and mobility to the first part of the duodenum which otherwise does not always exist in the normal healthy state. I shall say nothing upon the merits or demerits of the operation for extensive disease of the stomach. It is a very severe one, and the extreme gravity connected with its performance, together with the very doubtful nature of the result which may follow, must be well weighed with other considerations affecting the present sufferings of the patient and his future prospects of life if nothing is attempted.

GASTROLYSIS.

Upon the operation of gastrolysis and the condition for which it is practised I have not much to say. From various causes, but more particularly from gastric ulcer and gall-stones, adhesions form between the stomach and neighbouring parts. These adhesions may either so restrict and drag upon the viscus as to interfere with its normal contraction, or they may fix it in such a position as to cause obstruction. This latter derangement usually happens when the pylorus is involved. It may be either kinked or contracted. The symptoms associated with adhesions naturally vary according to the organic effect which they produce. Those which result from obstruction are of a nature similar to what follows upon obstruction arising from other better recognised sources and are often quite indistinguishable from them. On the other hand, symptoms arising from some impediment to normal contractile functions of the organ are often of a very obscure and obstinate character. It is only from the past history of the case—that is to say, some antecedent symptoms of ulcer or gall-stone—that the probable cause can be arrived at. This, indeed, is a class of cases where an exploratory laparotory has frequently effected the very best results, for the discovery of adhesions and their division with consequent liberation of the stomach have afforded complete and permanent relief. I have only one case in my present list which illustrates this condition. I shall refer to it more fully under the operation of gastro-jejunostomy; but I may briefly remark here that the adhesions, which were partially liberated, existed mostly between the pylorus and the under surface of the liver. They were the result, as we discovered after an exploratory gastrotomy, of an old healed ulcer. Surgery, then, has done much in recent years by the operation of gastrolysis to relieve and to cure various cases which were hitherto vague in their symptoms and absolutely intractable to all forms of medical treatment

I must here break away from the order in my list of operations, as time forbids my referring to all contained in it, and more especially also as I wish to direct some particular attention to the operation of

GASTRO-JEJUNOSTOMY.

This operation may now be regarded in practical hands as a comparatively simple and safe one, and its employment is becoming widened to the extent of replacing such operations as divulsion of the pylorus, pyloroplasty, and pylorectomy for cicatrical contraction of the pylorus. Its service in malignant disease of the stomach, whether of the body or the pylorus, is well recognised, and its value in the treatment of gastric ulcer and gastric erosion associated with hæmorrhage is becoming increasingly appreciated. There is no reason to doubt also that its employment in uncomplicated cases of gastric ulcer—such, for instance, as are intractable to treatment and by their prolonged continuance dangerous to life—is within the field of early recognition. I am able to bring before you this evening the records of six cases which I have operated upon within the last eight months. Five were successful, one was fatal; of the five I can show you two patients. The brief histories of these cases were as follows, and I narrate them before discussing anything further in regard to the operation itself.

CASE 4. *Cicatricial stricture of the pylorus; exploratory gastrotomy; gastrorrhaphy, and gastro-jejunostomy; death from exhaustion.*—A man, aged 35 years, was sent to me by Dr. J. R. F. Cullen of Alexandria, Dumbartonshire, and was admitted to the Victoria Infirmary on Sept. 28th, 1899. His symptoms apparently dated from about 15 years previously and at the time of my seeing him were evidently due to obstruction at the pylorus. On Oct. 4th the abdomen was opened by a median incision above the umbilicus. Manipulation of the pylorus externally revealed a resistant induration extending along the lesser curvature. On opening the stomach and inserting the index finger a contracted, somewhat irregular orifice was felt, admitting the passage of a No. 12 catheter but not capable of distension by moderate pressure of the finger. The exploratory incision was then closed and a posterior gastro-jejunostomy was performed, the union between the bowel and the stomach being effected by Murphy's button. The dilated stomach was lessened by first doubling in and securing one pleat of the anterior wall and over this inserting a second series of Lembert sutures so as to fold more deeply in the wall and approximate the lesser and greater curvatures. The patient rallied well from the operation and subsequently took milk-and-soda and passed flatus. He, however, soon began to show signs of failing strength and he died on the fourth day apparently from exhaustion. At the post-mortem examination the most marked feature found was the want of union between the opposing halves of the button and also the lack of union between the stitched walls of the stomach and other lines of suture. There was no general peritonitis but some suspicious appearance of recent inflammation in the region of the button. The pylorus was found to be contracted by a cicatrix, the result apparently of an old healed ulcer. I attribute the fatal result in this case largely to the very low recuperative powers possessed by the patient. He had been a chronic invalid for so many years that his tissues were in a poverty-stricken condition and incapable of exercising the necessary reparative powers for recovery after such an operation. It was, however, disappointing to lose the patient, because the operation was just the one to have given him permanent relief.

CASE 5. *Exploratory gastrotomy: gastro-jejunostomy for inseparable adhesions of the stomach to the liver, the sequel to chronic ulcer; recovery.*—A patient of Dr. W. Grant of High Blantyre, aged 45 years, was sent to me at the Victoria Infirmary on May 24th, 1899. About three years ago he commenced to complain of gastric symptoms which on admission were those of obstruction at the pylorus. On May 31st the abdomen was opened by a median incision above the umbilicus. Fibrous adhesions were at once encountered uniting the stomach to the under surface of the liver on the right side. These were ligatured and divided, when an exceptionally dense and intimate band of union was reached forbidding any attempt at separation. The stomach was opened to ascertain if possible the nature of this indurated mass. It was then found that an irregular-shaped ulcer with elevated but smooth edges existed in the lesser curvature about an inch from the pylorus. Its floor was deeply indented and it extended well

up into the liver substance. Any attempt at liberation of the stomach being deemed inadvisable, the exploratory gastrotomy wound was closed and a posterior gastro-jejunostomy was performed, union between the stomach and bowel being effected by Murphy's button. The patient made a comparatively uninterrupted recovery. The button was passed on the eleventh day. One month afterwards he had put on nine pounds in weight, and was in good health and able to take food well. As you see him at the present—that is, nine months after the operation—he is in perfect health, taking his food well, and is at his work.

CASE 6.—*Carcinoma of the pylorus; gastro-jejunostomy; recovery.*—The patient, a woman, aged 63 years, was admitted to the Victoria Infirmary on July 13th, 1899. For some months she had been failing in health, but it was only four months ago that she commenced to be troubled with symptoms of pyloric obstruction. On July 21st the abdomen was opened in the middle line above the umbilicus. A tumour was detected well under the liver to the right involving the pylorus and intimately adherent to the fundus of the gall-bladder. It was of about the size of an orange and somewhat nodular in outline. As the liver showed no signs of infection an attempt was made to perform pylorectomy. It was soon discovered, however, that numerous infected glands existed, passing upwards to the transverse fissure of the liver. Any further attempt at extirpation was therefore abandoned. A posterior gastro-jejunostomy was performed, union between the stomach and the bowel being effected by means of Murphy's button. With the exception of a little temporary bronchitis the patient made an uninterrupted recovery. She left the infirmary on August 16th, three and a half weeks after the operation, with the wound soundly healed. The button had not been passed. On Oct. 20th, three months after the operation, the patient presented herself. She stated that for some weeks after the operation she had improved greatly in strength and that she took her food well. Whatever she took kept down and she had never been troubled with vomiting. As far as she knew the button had not passed. On Jan. 8th, 1900, her daughter visited the infirmary and reported that her mother was in a very low state of health with swollen legs and failing, she thought, rapidly. The button had never been seen. She died from exhaustion on Jan. 18th.

CASE 7.—*Gastro-jejunostomy for extensive malignant disease of the pylorus and the pyloric region; recovery.*—In this case the man who was operated upon was 57 years of age and was a patient of Dr. Ross Carmichael of Cathcart, with whom I saw him in consultation on Oct. 11th, 1899. For two years the patient had suffered from some obscure gastric symptoms manifested mostly by distaste for food. For the last 18 months he had vomited and had manifested other symptoms of pyloric obstruction. On Oct. 19th the abdomen was opened. A tumour of considerable size occupied the pylorus and the right portion of the stomach. It was very smooth in outline but the margins of it, as felt along the anterior wall of the stomach, were lobulated. The growth was found to be adherent to the under surface of the liver. Excision not appearing feasible a posterior gastro-jejunostomy was performed with some difficulty owing to the extent to which the disease had reached along the fundus towards the left. Union was effected by Murphy's button. The patient made an uninterrupted recovery, taking his food without pain and putting on 10 lb. in weight in the course of three weeks. The button was passed on the twelfth day. I heard recently that this patient had commenced vomiting again. I fear that the explanation is due to the invasion of the artificial orifice by the growth.

CASE 8. *Carcinoma of the body of the stomach; gastro-jejunostomy; recovery.*—A man, aged 54 years, was admitted to the Victoria Infirmary on Jan. 4th, 1900. Nine months ago he commenced to feel a lack of energy which he had never experienced previously. He lost relish for his food and began to lose flesh. About this time or a little later he felt a burning sensation in the stomach which was often slightly relieved after the ingestion of food. On Jan. 13th the abdomen was opened by a median incision, exposing at once the tumour, which appeared like a large crescentic mass occupying the left portion of the body of the stomach, involving mostly the posterior wall and approximating at its centre the two curvatures. The liver appeared to be free from infection but enlarged glands existed in the lesser omentum. Excision of the tumour was abandoned owing to the infection of the lymphatic glands and a posterior gastro-jejunostomy was with some difficulty performed. Union between the stomach and the bowel was effected by means of Murphy's button. The operation lasted an hour. There were no subsequent untoward symptoms but recovery was greatly retarded by some stitch abscesses. At this date he is still an inmate of the infirmary but is well enough to get about and although it is about six weeks since the operation the button has not been passed. He now takes his food well and is feeling much relieved of some of his original symptoms.

CASE 9. *Carcinoma of the pylorus; gastro-jejunostomy; recovery.*[5]—The patient a man, aged 60 years, who had been under the care of Dr. Fraser Orr, with whom I saw him in consultation, was admitted to the Victoria Infirmary on Feb. 17th, 1900, suffering from gastric symptoms of obstruction at the pylorus. On Feb. 27th the abdomen was opened. Extensive disease of the pylorus was discovered with small nodules of tumour in the matted tissue around. The growth extended for about two and a half inches along the lesser curvature. No attempt was made to perform pylorectomy. A posterior gastro-jejunostomy was executed with the aid of a Murphy's button. As only a week has elapsed since the operation it is not possible to say much except that from the absence of all symptoms the patient seems to be in a fair way towards perfect recovery.

In reviewing briefly some of the special points of interest in these cases you will observe, in the first place, that I performed in all of them a posterior gastro-jejunostomy, effecting the union between the stomach and the bowel by means of a medium-sized Murphy's button. The more I practise this particular method of performing gastro-jejunostomy with the button the more I like it, and I can quite appreciate Czerny's recent opinion regarding it, that he prefers it to all others. Although the chief object of gastro-jejunostomy, by whatever method performed, is to admit a free exit of the gastric contents into the intestine, I am convinced that the operation subserves, in many cases, a not less important part in giving rest to the organ. This is the explanation of its great good in gastric ulcer, associated or not with hæmorrhage. Instead of the food being churned up and constantly moved about by the normal contractions of the stomach it passes rapidly into the bowel and so the organ is at rest again and in the best possible condition for repairing internal lesions. I believe the very material relief afforded in the last case just shown you (Case 8)—in which, as you will remember, the patient had no signs of obstruction but in which a large malignant tumour occupied the body of the stomach—was due to the rest afforded the organ by the operation removing sources of constant irritation.

I must not, gentlemen, be tempted to discuss other points, many and interesting as they are, in connexion with this operation. I fear that I have already overtaxed your indulgence. The subject which I have selected this evening is an extensive one and is becoming increasingly so, and I have found not a little difficulty in condensing within a reasonable space and still more within a limited time such material as that which I wished to present to you. The following table will briefly indicate the operations which I have performed since January, 1899:—

*Table of Operations upon the Stomach.**

Operation.	Disease.	Recovery.	Died.	Total.
Exploratory gastrotomy.	Extensive adhesions, &c.	3	—	3
Gastrostomy.	Carcinoma of the gullet.	5	1†	6
Gastrorrhaphy.	Perforated gastric ulcer.	2	—	2
,,	Dilated stomach.	2	—	2
Gastro-jejunostomy.	Cicatricial stricture of the pylorus.	2	1	3
,,	Malignant stricture of the pylorus.	6	—	6
,,	Carcinoma of the body of the stomach.	1	—	1
Pylorectomy.	Carcinoma of the pylorus.	1	—	1
—	—	22	2	24

* This table originally contained only the operations performed within the period of 15 months from which the cases were taken for the address. I have, however, now added those executed since that date, so that the table at present represents the total number of operations performed upon the stomach within the last year and ten months—i.e., down to Oct. 31st, 1900.

† The death on the fifth day in this case was unconnected with the

[5] This case occurred a few days after the delivery of the address, but as the opportunity is afforded it seems worth while to record it.

operation and due to increasing exhaustion from the very extensive disease present.

I must not conclude without acknowledging the valuable help which I have received in most of the above operations from my assistant colleague Dr. Grant Andrew, and from Dr. D. Lamb, the anæsthetist to the infirmary. To have a complete sense of reliance on one's right hand coöperator and to be relieved of all feeling of anxiety regarding the administration of the anæsthetic are, indeed, means in the performance of any grave operation which contribute in no small way to successful results.

Inaugural Address

ON

BACTERIOLOGICAL DIAGNOSIS OF DISEASE.[1]

BY SHERIDAN DELÉPINE,

PROCTER PROFESSOR OF PATHOLOGY, OWENS COLLEGE, MANCHESTER.

GENTLEMEN,—Fifty years ago the notion of a "contagium vivum" as the cause of an infectious disease was considered by a great number of well-informed people to be a wild and almost absurd hypothesis. There had been, and there were still, strong advocates of the theory, but their following was small. Pasteur's work in connexion with fermentations and the features which infectious diseases and fermentations had in common revived the belief in the existence of infectious germs. In 1863 Davaine showed that splenic fever was due to the presence of a bacillus which he and Pollender had observed 13 years previously in the blood of animals which were affected with that disease. This discovery was completed in 1877 by Koch and almost at the same time by Pasteur. Koch was able to trace the whole life-history of the organism by adopting simple and accurate methods of culture. He demonstrated the production of spores, in which form the bacillus is capable of resisting unfavourable external circumstances and thus to infect certain localities more or less permanently. On his side Pasteur established with scientific rigour some of the principles upon which vaccination with attenuated cultures of the bacillus could be carried out In 1865 Villemin proved the infectiousness of tuberculosis by systematic inoculation, the results of which led him to infer the presence of a micro-organism of the same character as that found in anthrax. This inference was at length proved to have been correct by Koch, who in 1882 announced his epoch-making discovery of the tubercle bacillus which he was able to isolate and cultivate outside of the body. Meanwhile the bacterial cause of many diseases was more or less fully established in a number of cases. Obermeier in 1873 demonstrated the presence of a spirillum in relapsing fever. About 1877 Hansen announced his discovery of the bacillus lepræ and Bollinger of the actinomyces bovis. In 1879 Neisser found the gonococcus. In 1880 Eberth saw the bacillus of typhoid fever which was afterwards more fully investigated by Gaffky (1884). In 1881 Pasteur and Ogston showed the relation between various micrococci and certain septic infections or suppurations. About the same time Laveran discovered the organism of malaria in the blood. In 1883 Klebs saw the bacillus of diphtheria, which was more fully investigated by Löffler in 1884. In 1884 Koch described the cholera vibrio under the name of "comma bacillus." About the same time Nicolaier found the bacillus of tetanus. I cannot attempt to allude to all the work which has been done in recent years, but I may add to the previous list the bacillus of influenza discovered by Pfeiffer in 1890, and that of plague found simultaneously by Yersin and Kitasato in 1894.

The value of all these discoveries was not recognised very rapidly except in a few cases. This was partly the fault of methods which were not always perfect enough to make the application of the newly-acquired knowledge practical, and partly to the antagonism of very able medical men belonging to an older school. Yet, considering the very great difficulties attending the diagnosis of many obscure cases of infectious disease, one would have thought that the very precise indications given by bacteria and their products in a large proportion of those cases would have been early taken advantage of whenever possible. There are, however, several reasons why several bacteriological methods should not have found their place in ordinary work: 1. The study of practical bacteriology was not early, and is not yet generally, recognised as an *essential part of medical education*, and many medical men have not had an opportunity to convince themselves by their own observation of the accuracy of statements made by bacteriologists. 2. Although many bacteriological methods are so simple that they can be carried out with the aid of a good microscope and a few reagents, test-tubes, and flasks, there are others which are difficult to carry out elsewhere than in a laboratory where typical cultures of living organisms are stocked and animals can be inoculated, carefully isolated, and studied. 3. Bacteriological work, except in the case of simple microscopical examination, requires patient attention to details, cannot be hurried, and must be attended to at the right time; it can seldom be carried out successfully in the short and irregular intervals of a busy practice.

The extraordinary advances which surgery owes to Lister's methods, and medicine to the work of Pasteur, Koch, and their pupils, are sufficient proofs of the utility of bacteriology, and they suggest the desirability of making bacteriological methods generally available. It is not only of interest to the patient personally that the shortest methods of diagnosis should be available, but it is also a matter of public concern, for it is only by early diagnosis that effective methods of prevention and sometimes of treatment can be utilised before a disease has spread through a community or caused irreparable damage in the individual. The mastery which the sanitary authority of Glasgow has obtained over the epidemic of plague that was recently threatening that town is a good example of this.

Having since 1882 devoted much attention to the diagnosis of disease by laboratory methods, I have for many years felt convinced that such methods deserve to have a more generally recognised place by the side of ordinary clinical methods, which must of course always remain the basis of practical medicine and surgery. In addition to this, rapid, accurate diagnosis of infectious diseases is a matter of such public importance that public authorities should take an active interest in the question. When given the charge of the important laboratories at Owens College in 1891 I decided to do all in my power to bring this about. At first I met with much indifference on all sides, except in times of dramatic urgency, as when Manchester was threatened by an epidemic of Asiatic cholera in 1893. But since then matters have considerably altered, and in 1895 several public authorities had recognised the need of establishing regular connexions between their public health department and bacteriological laboratories. Some sanitary authorities in England had some time previously recognised the need of bacteriological investigation in connexion with their work; among these I may mention Bristol and St. Helens, where Dr. D. S. Davies and Dr. J. Robertson respectively had taken the matter in hand. But putting aside, as being beyond the scope of daily work, the arrangements made by the Local Government Board with Dr. Klein and other bacteriologists for special investigations, I believe that the bacteriological laboratory in Manchester was the first in this country where the bacteriological diagnosis of disease was placed freely at the disposal of all medical men in a number of districts by the combined action of sanitary and college authorities. Since that time some 60 sanitary authorities have become regularly connected with the Owens College Bacteriological Department. Our example has been followed in many other parts of the country, where, judging by the correspondence which I have had on the subject, our experiment has created much interest and has been of some use to other authorities. I do not intend here to discuss whether it is advisable for each sanitary authority to have a bacteriologist or whether, as I believe, it is better not to attempt such work except in thoroughly well-fitted bacteriological institutes having a well-paid and efficient staff, connected whenever possible with a medical school: that the work can be carried out with some success under the last conditions is, I think, proved by the growth of this work in the bacteriological laboratory at Owens College, a growth which has not been

[1] Delivered at the opening of the winter session of the Derby Medical Society, on Oct. 19th, 1900, by request of Dr. Laurie, the President for the coming session.

stimulated by any kind of sensational announcement. In 1896 only 300 reports were issued to sanitary authorities, in 1897 over 1500 were issued, in 1898 over 2500, and in 1899 over 3000. In 1900, over 4000 reports[2] will have been issued by the end of the year. This rapid progress does not only indicate a certain measure of administrative success but it shows that bacteriological methods are gradually taking the place which they should in the diagnosis of disease.

[These introductory remarks were followed by a demonstration of the most important methods employed for diagnostic purposes, plague, tuberculosis, diphtheria, and typhoid fever being selected to show how each one of these methods was applied.]

ABSTRACT OF

An Inaugural Address

ON

SURGERY AS A SCIENCE AND AN ART.

Delivered at the Opening of the Winter Session at Queen's College, Cork, on Oct. 26th, 1900.

BY C. YELVERTON PEARSON, M.D. R.U.I., F.R.C.S. ENG.,

PROFESSOR OF SURGERY AT THE COLLEGE.

[PROFESSOR PEARSON, after a few introductory remarks, proceeded to the main subject of his address—namely, Surgery regarded as a Science and an Art. Though surgery could never be looked upon as an exact science such as astronomy, yet it answered the definition of a science as being a correlation of knowledge. The good surgeon should be acquainted with biology, natural philosophy, chemistry, anatomy, physiology, histology, pathology, and bacteriology. To these must be added at least an elementary knowledge of logic. The foundation-stone of surgery, however, was anatomy and anatomy learned by careful dissections. Professor Pearson then went on to speak of the relative importance of the other sciences. Morbid anatomy was of course of special importance. Chemistry was necessary for the true understanding of much of physiology, and physiology could not have advanced so far as it has without the help of biology. Professor Pearson continued:]

PATHOLOGY AND MORBID ANATOMY.

Last, but by no means least, let me refer to the science of pathology or the study of diseased conditions and processes which, strictly speaking, bears the same relation to morbid anatomy that physiology does to normal anatomy; but so closely are the two connected that while pathology could never have existed without physiology, the latter, on the other hand, owes very many of its most important advances to the former. Now it is evident that in order that we may become scientific surgeons we must closely study the appearances presented by disease, both in the living and the dead body, so that we may be able to recognise and to deal with them in practice. Further, we must be able to understand the nature of diseased processes and the means designed for resistance to invasion, the provisions made for natural recovery, and the phenomena of natural and acquired immunity from certain diseases—in a word, the marvellous *vis medicatrix naturæ*—if we are successfully to guide our patients through the tempest of disease to that blissful haven which is known as health.

It is in the possession of such knowledge that the truly skilful and scientific surgeon or physician excels his more empirical brother by frequently watching and guiding the natural processes of recovery rather than—as is so frequently done—interfering with them by the indiscriminate use of drugs. Now how is such knowledge as this to be obtained? So far as the study of diseased conditions in the living is concerned you are provided with ample material in our clinical hospitals where, if you only give the amount of time and attention that is desirable in bedside observations, it will be your own faults if you do not gain a very thorough acquaintance with all the ordinary diseases that flesh is heir to. On the other hand, it is with deep regret that I feel obliged to admit that our opportunities for the study of morbid anatomy and pathology are not all that is desirable. This is in part due to the natural prejudice, amounting almost to a superstition, that exists in this country against the performance of post-mortem examinations. In my opinion it would be much better for the whole community at large if this state of things were altered. In how many cases of sudden death where the obedient coroner's jury brings in a verdict of "Death from heart disease"—often without the slightest medical evidence—would a carefully conducted post-mortem examination reveal a totally different explanation of the real cause of death. Moreover, I have long been fully persuaded in my own mind that the extremely careless way in which burials are permitted in Ireland, previously to registration, and often without proper certification, is a practice strongly to be deprecated and is calculated to prove a direct incitement to crime. It is certainly about time that the authorities awoke to their proper sense of duty in this respect. Notwithstanding these difficulties the industrious student, by making use of those opportunities presented to him, may do a great deal, such as losing no chance of witnessing a post-mortem examination when it occurs, by the careful study of recent and preserved pathological specimens, and more especially by utilising his powers of observation in the dissecting-room, where he will find a mine of wealth. At a time when pathology as a distinct course was not included in the curriculum, by carefully taking advantage of the opportunities presented to me in the dissecting-room in the years during which I acted as demonstrator I gained a knowledge of pathology which has proved to me of inestimable advantage in dealing with disease.

There is, however, another aspect in which I wish to review this question, and that is the condition in which this and the sister colleges have been obliged to remain with regard to the teaching of pathology. It certainly would be an unpardonable evasion of duty on my part if I did not protest in the strongest manner against the neglect to which we have been subjected in this respect. And it certainly does not redound to the credit of successive Governments that at a time when pathology has made such enormous strides by leaps and bounds, when its importance in relation to the prevention and treatment of disease has been recognised in all civilised countries throughout the globe, when men of the highest scientific attainments are to be found devoting their lives and in many instances their private means, nay, in some cases even their own persons, to pathological investigations in the cause of suffering humanity, it should be left to the respective governing bodies of the Queen's Colleges in Ireland to provide a teacher in pathology for their medical schools in order that they may not be behindhand, and it speaks volumes for the disinterestedness of the medical profession when men of recognised ability and careful training have been found to come forward to fill a gap that should never have been allowed to exist for a remuneration that is wholly inadequate. I need scarcely say that in the natural course of events it is not to be expected that such men will remain with us unless they are at least provided with a salary that will enable them to devote their entire time to the study and teaching of pathology. May I express the sincere hope that the Government just returned to power will recognise the justice of our claims and inaugurate the dawn of a new century by a substantial recognition of our grievances. As you well know, I am no politician, and even if I were it would not be within my province to touch on political matters; but the subject on which I am speaking is not a political one, and I feel that I am speaking nothing but the simple truth when I say that I regard the manner in which the subject of pathology has been permitted to remain unendowed in our school at the close of the nineteenth century as nothing less than a national disgrace. If any efforts on my part, either by words or actions, may prove of some slight assistance in bringing this most important matter under the due notice and recognition of Her Majesty's advisers the knowledge of having done my duty will be ample reward.

Apart from its importance in relation to medical and surgical teaching, consider the advantage to the public in general of having at hand a skilled pathologist provided with a fully-equipped laboratory to whom to refer such important questions as the investigation of doubtful cases of rabies and

[2] Bearing on typhoid fever, diphtheria, tuberculosis, botulism, cholera, plague, various animal diseases, milk supplies, water supplies, disinfection, &c.

the bacteriological examination of milk and water; and at the present moment, when the possibility of a visitation of the much dreaded plague is not altogether a remote contingency, to whom would the medical officer of health refer the investigation of doubtful cases if not to one who devoted his entire time to pathological research?

Having referred in a very superficial manner to the importance of studying each of the foregoing sciences I may point out that in many instances it is requisite for us to employ most, if not all, of them for the thorough investigation of a single problem in surgical science. We are told that "animated, or rather inspired, by a far more comprehensive spirit of inquiry than that which relates to the human species alone, John Hunter's view of pathology was an extension of a colossal physiology and a corresponding anatomy embracing the whole living creation. It was from this vast range of biological science that Hunter sought to interpret the structural condition and the phenomena of life in any one species; and thus, for example, to enlighten our otherwise isolated knowledge of human anatomy, physiology, and pathology; of man, structurally and functionally, in the states of health and disease. From this elevated point of view we must look to appreciate justly the Hunterian conception and its influence on the British school of surgery. Subsequently, it became apparent how largely and intimately the sciences of physics and chemistry enter into this system of biology; and thence we might trace the grand contributions of the continental schools more especially, and particularly in Germany and France. Here, then, we discern the three primary elements of modern scientific medicine.'

Now let us see what is the aim and object of all this scientific knowledge? To you who mean hereafter to be thoroughly practical surgeons and physicians the two important considerations are first to be able to recognise and diagnose disease, and second to be able to treat it with success. Now at one time it was thought that the surgeon's duty in the matter of diagnosis was a very much simpler matter than that of the physician and consequently the highly skilled and cultivated physician was looked upon as occupying a more elevated position than the surgeon. I have not the slightest inclination to institute a comparison between the two—each is worthy of the highest regard. But it is my duty to point out to you that the modern surgeon requires, not alone all the means and knowledge possessed by the physician, but even more in those cases where a diagnosis can only be arrived at by the employment of surgical instruments and appliances, which cases are so numerous that it is unnecessary for me to specify any of them. To be a good diagnostician you require then the fullest development and training of all your senses; while it is important to learn the history and nature of the symptoms from the patient, it is still more important to make your own observations. He who depends chiefly or altogether on the details of symptoms will make more mistakes than one who places most reliance on his own powers of observation and physical examination. Take, for instance, the amount that is conveyed to the mind of the skilled observer by one look at the patient. Then in the application of touch in its highest state of development what an amount of information is conveyed—the sensations of true and false crepitus, of fluctuation, of elasticity, of resistance, of mobility, and so on. We have need of our hearing powers in the application of percussion and auscultation to the diagnosis of abdominal tumours and various other conditions. For the employment of smell and less frequently of taste I could adduce several examples where the use of these senses furnish much assistance. But I pass to the brief consideration of some of those applications of scientific methods which are of more recent growth; amongst which we find the larger number are derived from the science of physics, such as the use of the clinical thermometer, which not alone conveys to us when suitably employed the knowledge of the general bodily temperature, but by a series of consecutive observations the results of which when transferred to a chart will often in itself enable us to arrive at a correct diagnosis and is of such invaluable assistance in conveying at one glance the progress of the case. What a contrast in this respect our surgical wards present to-day with what they did some 25 years ago, when a temperature chart was rarely seen and when the surgeon relied on that most deceptive sensation of temperature derived from contact of his own hand with the patient's body. Of less frequent employment and more restricted use is the surface thermometer, by which local variations of temperature can be determined.

Then by the application of acoustics in the use of the stethoscope or its numerous modifications the surgeon often derives information not otherwise obtainable. As another example of the value of acoustics let me cite the use of the tuning-fork in certain affections of the ear.

From optics we gain still more extended advantages—e.g., the use of the ophthalmoscope, the laryngoscope, the rhinoscope, &c. And when combined with the electric light we have the cystoscope, with which we can illuminate and examine the interior of the bladder, and thus recognise certain diseased conditions in the living in a manner undreamt of by our forefathers. Another optical instrument, the value of which to the diagnostician cannot easily be over-rated, is the microscope. I cannot in this short sketch convey to you the numerous instances in which it has to be employed, but may especially remark on its assistance in diagnosis of affections of the urinary organs, the determination of the character and structure of various tumours, and the examination of the blood in certain obscure conditions where, by counting the corpuscles and determining the presence of leucocytosis, the existence of suppuration, &c., may be inferred. It is scarcely necessary to refer to its association with the discovery and advancement of pathological science, called bacteriology; but I take this opportunity of remarking that owing to the rapidly advancing nature and highly specialised character of the latter science there is a growing tendency amongst medical men to refer most, if not all, of their microscopical examinations to the pathologist. I think this tendency, if allowed to progress too far, will prove most disastrous. For what purpose do you learn the use of the microscope in connexion with practical biology, chemistry, histology, and pathology if, when it comes to be a question of diagnosis, you are going to hand over to another in all cases that portion of the examination which, owing to your education you ought to be fully competent to conduct yourself? There is no doubt that those who have their time completely occupied with the various other duties of the profession are obliged to resort to this assistance, and it is equally important that we should all seek the assistance of an expert in pathology in certain important and difficult instances; but, believe me, he will make the more highly accomplished physician or surgeon who is able to rely on his own powers of observation.

[After a reference to the use of the x rays and to the value of a knowledge of chemistry in surgery Professor Pearson pointed out how essential it was in investigating a case to make use of all the means of search at our disposal. He then passed on to consider the germ theory of disease and gave a short life-history of the theory, concluding with an account of the technique of an operation carried out with all the modern precautions as to asepsis. He then proceeded to the consideration of the second part of his subject:]

SURGERY AS AN ART.

Let me now pass for a few moments to the consideration of surgery as an art. If we seek for a definition of art in its most extended and popular sense we find that it means everything which we distinguish from nature. The term is, however, usually employed in a more restricted manner and various definitions are given according to the particular standpoint from which the subject is viewed. Thus Schiller tells us: "Art is the right hand of Nature; the latter has only given us being, the former has made us men"; while Lavater says: "Art is nothing but the highest sagacity and exertion of human nature, and what nature will he honour if he honours not the human?" We are told that surgery was already an art when medicine proper was but a phase of superstition. The earliest notices of it occur among the Egyptians who, as we find represented on obelisk and in the temple, practised incisions, scarifications, probably even amputations, long before the date of the Ebers papyrus 3500 B.C. An operation for cataract was also known to them. The surgery of the Jews was an importation from the Egyptians. Surgery was held in very high esteem in very remote times among those who practised the Indian healing art, who had a proverb to the effect that "a physician who is no surgeon is like a bird with but one wing." They had a large assortment of steel cutting and cauterising instruments and held that "what drugs and knives cannot cure may be cured with fire." In some of our museums may be seen surgical instruments contemporary with the votive offerings of the

remotest Egyptian epoch—lancets, catheters, specula, and cauteries. A few years ago I had an opportunity of seeing some specula recovered from the ruins of Pompeii which corresponded very closely with some of our modern patterns. However interesting it might prove to trace the history and development of the surgical art I have no intention of so occupying your time, but I would refer you to historical records and a modern work by the late Mr. J. F. South, entitled, "Memorials of the Craft of Surgery in England."

We are concerned with the present, and permit me to tell you that in order to become successful surgeons it is quite as necessary for you to study the *art* as well as the *science* of surgery. A truly great surgeon should perform all his work in a really artistic manner; a little experience will soon convince you that the cleanness with which an incision is made and the accuracy with which the margins are subsequently co-apted have an influence on the rapidity of union and on the subsequent appearance of the scar that is quite apart from the details of the most perfect asepsis. This comes to be a matter of the gravest consideration to the patient when we are dealing with operations on the face or neck and the subsequent appearance of the scar is a matter which will make or mar the reputation of the surgeon.

Now it is of some importance that we should consider what steps are taken to secure to the student of surgery the development of this artistic skill. Well, in a somewhat indefinite way they may be considered as amply sufficient, provided that the student avails himself of all the opportunities presented to him, and of these there is, first of all, dissection. It is by the careful and continued use of the scalpel and forceps in the dissecting-room that the hands of those not previously accustomed to such work become trained to some extent. Then the most excellent opportunities are presented in the work carried on in our biological, our histological, and pathological laboratories for acquiring the art of accomplishing the most delicate manipulations. When engaged in these operations take my advice and accustom yourselves at the earliest opportunity in the use of both hands equally. When a student I was led to infer that the art of being ambidextrous was only of advantage to the ophthalmic surgeon. No greater error could be made. There is scarcely an operation or manipulation of any kind in which the interchange of hands may not often be of advantage, whether it be in the use of a knife or a pair of scissors or in the removal of a pair of forceps. What an awkward appearance is presented by the efforts—often of a fruitless character—of an unskilled assistant in attempting to release a pair of compression forceps with the left hand.

Again, you have a further opportunity of learning the use of cutting and other instruments when taking out the course of operative surgery. I have heard a very eminent surgeon, for whose opinion on most surgical matters I entertain the deepest respect, express the opinion that operative surgery was a branch of the usual surgical examination to which he attached comparatively little importance; with this opinion I desire to join issue. Is it to be expected that anyone will be competent to operate on the living body who is not able to do so on the cadaver? Are his patients hereafter to be the subjects on whom he is to practise to acquire manipulative skill? If the examination in surgery was simply required for the purpose of permitting the candidate to acquire a qualification in medicine I should have no objections to offer, but so long as our universities and colleges grant degrees and diplomas in surgery in my opinion they should be satisfied that their graduates and licentiates are skilled in the use of surgical instruments and appliances.

An additional opportunity is presented in our hospital work for attaining manual skill to those who take advantage of such training in the application of bandages, splints, and dressings, and how easy it is to detect the 'prentice hand in the application of a simple bandage by first giving him a choice of limbs and then asking him to bandage the opposite one. Here the man who has only 'practised bandaging on one side of the body at once comes to grief. Now from these considerations it may be fairly inferred that if any intelligent student does not become a fair artist as well as a scientist in his profession the fault lies with himself. Notwithstanding this I hold the opinion that the training in the practical, and more particularly the manipulative, portion of our profession leaves much to be desired, and I do not know of any form of training that would prove of so much advantage as an acquaintance with the handicrafts of sewing and carpentry. It has been my fortune to witness men who were considered excellent surgeons make such a display when sawing through a bone in an ordinary amputation that it was evident to any observer that they had never learned to saw a bit of wood, with the inevitable accompaniment of locking of the saw and splintering the bone, and on other occasions the most clumsy attempts made at the introduction of certain forms of suture that were a little bit out of the common.

Now I am not suggesting that a course of carpentry or sewing should be added to the burdens of what appears to be an already overloaded curriculum, but lucky is the man who has been taught the use of the needle in childhood, best of all when it has been done at his mother's knee. Those of you who have not had such advantages, or who having had the opportunities did not profit by them, will do well while you are yet young, and while your fingers are yet pliable, to practise for yourselves the application of all the forms of suture on some simple fabric before you attempt the application of a needle and silk to the intestines of a human being. Learn to use a saw and a chisel on a piece of wood before trying them on a living bone.

What is the present position of surgery as an art? In an edition of his classical work on surgery, written several years ago, Mr. Erichsen expresses himself in the following terms: "To my mind it appears as if we had already reached something like finality in the mere manipulative art of surgery; though I hesitate much to use the word 'finality,' for I know well how apt a man is to suppose that art, to the prosecution of which he has devoted his life, to have attained to the final limit of perfection, yet, looking at the question as dispassionately as possible, we cannot but come to the conclusion that we can scarcely hope to pass far beyond the line at which we have arrived in the direction of extreme precision and almost absolute certainty in the mechanical performance of the operations of surgery, and that in this direction the progress of modern surgery is nearly barred. At the same time we may reasonably expect that the details of the method of practising operations may from time to time be materially modified or improved by the skill of individual operators, by the ingenuity of surgical mechanicians, or possibly by the introduction of new agents as aids to our art." Since these words were written many, indeed, have been the advances, of which I need only refer to the great improvements that have taken place in dealing with the abdominal viscera, such as the introduction of Senn's plates, of decalcified bone-bobbins and Murphy's buttons, and the more perfect methods of suture for either lateral or end-to-end anastomosis of the intestines; the improved methods of dealing by operative procedure with certain forms of fracture; and the introduction of serum therapeutics, which is, of course, the outcome of pathological and bacteriological research, but which promises much and has already proved of inestimable value in to a large extent minimising the severity of that much-dreaded disease diphtheria.

I must pass on to another matter. The large majority of those who go out into the world as physicians and surgeons become what is known as general practitioners, and it should therefore be your ambition to become acquainted with all the branches of your profession, otherwise you will never be sound advisers. To the few it is permitted to select some particular branch and become what is known as specialists; where the opportunity offers the temptation to do so is very great, as it largely diminishes the responsibility of the individual and makes his work easier and more agreeable, but has an undoubted tendency, on the other hand, to narrow the mind and obscure the discriminating powers. I well know that in treating of specialists and specialism I am treading on delicate ground, but I believe the rapidly growing craze of the public for specialists is fraught with the gravest danger to themselves and to those who pander to it. Not so long ago I was asked to give the name of someone whom I could recommend as a liver specialist. My answer was that the profession did not recognise the existence of such a person and that anyone who posed as such could be little better than a charlatan; that anyone who was competent to treat affections of the liver should be equally competent to deal with affections of the heart and lungs and of the stomach and kidneys, &c. Such is the teaching that we must necessarily derive from the study of physiology. Any one student of standing knows that you cannot alter the functions of any one important

organ in the body without producing some accompanying effect on all the others, but the public, or at least some of those who can afford it, would like to have one medical man for their heart, another for their stomach, a third for their kidneys, and so on. The craze does not even stop here; some people are not even content with having advice from a thoroughly sound surgeon but they seek advice from a man who does nothing but treat joint affections or even one who confines himself to some particular joint, if they could find him. I have known where a lady had one medical man to give advice about the condition of her heart, while another was to treat her stomach, and a surgeon was at the same time to attend to an injury of the lower extremity. Neither was supposed to encroach on the domain of the other. Need I point out that if all were not well-educated medical men who thoroughly understood the management of diseases in general and that each carried out the treatment for one particular ailment the various treatments would be almost certain to clash and great would have been the danger to the patient. There is no one more willing than myself to recognise the advisability of specialism under proper conditions. Some of the best work has been done by men whom the public would regard as specialists—such as Spencer Wells and Lawson Tait—but these were men who were possessed of a broad and comprehensive knowledge of medical science as a whole. On the other hand, you will find that the greatest work of all is done by men who have not specialised in the ordinary sense but who extended their work over wider fields. I need only mention such men as Lord Lister, Jonathan Hutchinson, Kocher of Berne, and Doyen of Paris among the host of workers. On the subject of medical specialism I think I cannot do better than refer you to some observations of Dr. Oliver Wendell Holmes, one of the most cultivated minds that the profession has ever produced, which you will find in his charming little book, "Over the Teacups."

Having thus in a very imperfect manner brought before you the leading principles which should guide you in acquiring a knowledge of the science and art of surgery and the subjects which are so closely interwoven with it, let me earnestly entreat you to make use of the excellent advantages which this College and its associated hospitals afford for medical education; by doing so you will not alone bring credit to yourselves but reflect it on your teachers and the Cork Medical School; and will hereafter, I trust, make, if not brilliant, at least what is more valuable, successful and worthy exponents of medicine and surgery. To aid you in so doing shall be my constant and earnest desire. But let me ask you in conclusion also to cultivate those higher faculties of which Tennyson speaks—

> "Self-reverence, self-knowledge, self-control,
> These three alone lead life to sovereign power;
> Yet not for power (power of herself would come
> Uncalled for), but to live by law,
> Acting the laws we live by without fear."

UNCOMPLICATED ÆSTIVO-AUTUMNAL FEVER IN EUROPEANS IN THE GOLD COAST COLONY, WEST AFRICA.

BY ALBERT J. CHALMERS, M.D. VICT., F.R.C.S. ENG.,
ASSISTANT COLONIAL SURGEON.

Preliminary.—As the published accounts of the fevers of the Gold Coast Colony are not numerous His Excellency the Governor, Sir Frederick Hodgson, K.C.M.G., has kindly permitted me to offer this note for publication. I have to acknowledge the kindness of Dr. Henderson, the chief medical officer, in giving me advice, the benefit of his long tropical experience, and every encouragement in this work.

Prevalence.—Æstivo-autumnal fever is perhaps the most common type of malarial fever among Europeans on the Gold Coast and this, in its uncomplicated form and without malignant symptoms, forms the subject of the present note. It is most prevalent in the wet season, and during the last three years the largest number of cases in Accra have occurred in either June or July.

Predisposing causes.—Predisposing causes to fever are numerous and to the medical attendant at least are most important. The chief of these are as follows: 1. Chills.—Chills are especially to be avoided on this part of the West Coast, as they form an important predisposing cause of fever. They principally act in the cold or wet season. 2. Constipation.—Constipation, by tending towards a loaded condition of the portal system and by this to impairment of the action of the liver, upsets the equilibrium of the functions of the body and in this way predisposes to fever. 3. Mental worry.—This is a very common predisposing cause. In my experience here I have known men worry about their work to such a degree that it has impaired the vitality of their system and has rendered them more open to take fever. 4. Excesses of any description.—(*a*) Over-work; (*b*) over-exertion; (*c*) sexual excess; (*d*) alcoholic excess; and (*e*) excessive indulgence in food. These excesses by lowering the vitality of the body predispose to fever. Over-work—i.e., working more than a man has strength for—is an important factor. Alcoholic excess is not the great predisposing cause of fever which many people think it to be. 5. Disease of an organ.—Disease of an organ of the body predisposes by lowering the vitality. A most common predisposing cause, in my opinion, is gonorrhœa. 6. Food.—Insufficient or bad food or a sudden change from poor and insufficient to better food by upsetting the digestion may predispose. This is seen in persons who return from long residence in the bush. 7. Insolation.—Exposure to intense heat in the midday without actual sunstroke may act as a predisposing cause. These are the most important predisposing causes met by me in Accra, and in my opinion they can be one and all summarised into one—viz., anything which lowers the vitality of the body.

The method of infection.—Infection is without doubt by means of the mosquito, of which fact I have had numerous proofs. The genus anopheles is the one which I have found responsible for the fever and generally the species pictus and costalis, but in Kumasi I found a small variety which, as far as I know, is new, and a short account of which may be interesting. Unfortunately, owing to the nature of the march to the coast I lost all my specimens, and during the siege of Kumasi I had not time to make drawings. During the month of April—i.e., at the commencement of the wet season—there were a number of cases of æstivo-autumnal fever among the European residents in Kumasi; out of 16 persons six suffered from this fever, and of the remaining one had just had fever and another developed an attack in May. At the end of April and at the beginning of May eight more Europeans arrived, and of these five suffered from fever and one died. So that out of 24 persons 13 had fever—i.e., 54·16 per cent. During April mosquitoes were rare and particularly the common genus culex, but a small anopheles was invariably to be found in the quarters and even in the mosquito curtains of Europeans. This small anopheles frequently contained the malarial germ in its stomach and, in my opinion, was the direct cause of the outbreak of æstivo-autumnal fever. This little anopheles, I believe, has not been described. I therefore venture to call it "anopheles Kumasii" and to append a very brief description.

Anopheles Kumasii.—It is a small black mosquito. The wings have four black spots on the costa separated by three yellowish spaces and distinct dark spots on the other veins scattered over the wing. The abdomen is black and not banded, but the posterior portion of each segment is darker than the anterior. The female is a small black mosquito 3·5 millimetres in length and having wings three millimetres long. The head is black with light-coloured hairs; the antennæ have light-coloured joints; the palpi are black with three yellow marks; and the proboscis is black except at the apex. The thorax is slate-coloured with two dark lines dorsally and two slanting lines laterally. The hairs are light yellow. The wings are iridescent with four black spots on the costal margin and others scattered about on the veins. The four black spots on the costal margins are separated by yellowish spaces. Of these spots the first is the longest, extending along about one-third of the costal margin and the other three are much smaller. When examined closely these spots are seen to consist of two rows of dark scales situated on the costal margin and on the longitudinal vein directly below and parallel to it. In the first large spot these dark scales start from the junction of the wing and thorax on the costal margin, but on the vein only half way along the line of costal scales. The abdomen is black without rings but with the posterior portion of each

segment darker than the anterior. The legs are in general dark coloured; the femora are not yellowish at the base, and the tibiæ are not yellowish on the outer side. The tarsi are ringed distally and proximally. The male is much the same as the female. Its length is four millimetres and the length of the wing is three millimetres. Its habitat is in dwelling-houses in Kumasi, Ashanti, West Africa.

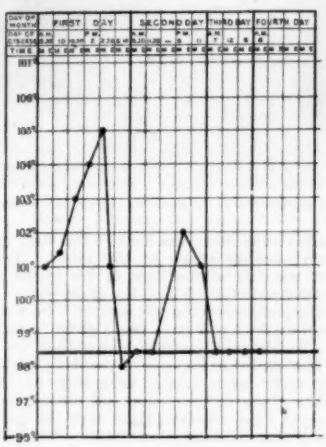
Such is the brief and, I am afraid, imperfect description drawn from notes which I was able to bring from Kumasi in the march out. I regret that the times were not settled enough to make photographs of the mosquito in Kumasi. I was able to find its larvæ on the margin of the marsh which nearly surrounds Kumasi.

The causation.—This is the parasite of the æstivo-autumnal fever, "hæmomenas præcox." At first small and unpigmented, the parasite grows and may be of the size of from one-fifth to one-third of the corpuscle and becomes pigmented. The parasites which I have most commonly found in the blood have been unpigmented, containing a darker central spot (that is to say, ring-like forms), but pigmented specimens are common. The relationship between the parasite and the disease is demonstrated by the following case illustrated by a temperature chart (Chart 1).

Date.	Time.	Temperature.	Parasites in the blood.
Oct. 25th, 1899.	9.30 A.M.	101° F.	Chill, no parasites.
	2 P.M.	105° F.	No parasites.
	6 P.M.	101° F.	Unpigmented parasites.
Oct. 26th, 1899.	8.30 A.M.	98·6° F.	Pigmented parasites.
	3 P.M.	99° F.	Well-developed pigmented parasites.
	6 P.M.	102° F.	A very few parasites.
Oct. 27th, 1899.	8 A.M.	98·4° F.	No parasites.

Clinical types of the fever.—Generally the clinical type of the fever is quotidian (vide Chart 1), rarely it is tertian (vide Chart 2), but these typical fevers may be altered and become almost continued fevers by slight complications without malignant symptoms, e.g. (Chart 3), a quotidian

CHART 1.

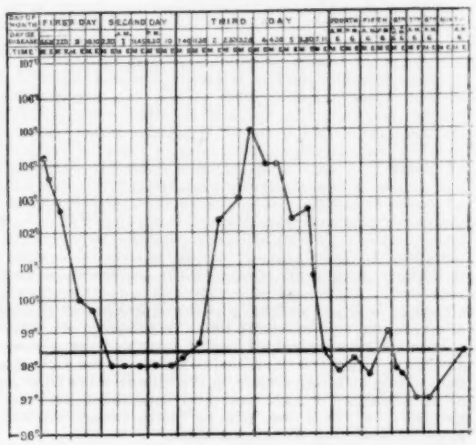


Quotidian type.

fever masked by a severe attack of gonorrhœa. In my experience the most common of these slight complications which produce alterations in the fever chart are due to (1) insanitary surroundings; (2) undermining of the constitution by such things as repeated fevers, any form of excess, or by disease in some organ of the body; and (3) mental worry. The attack may be ushered in by a chill or may simply begin with pain in the limbs and back and perhaps sickness. The initial rise of temperature is generally high, often 105° F. or more; sometimes a pseudo-crisis and pre-critical elevation are noted and the temperature may fall at the crisis below normal. In the masked fever a crisis may not be noted. The attack may be repeated for a few days and then resolve in the uncomplicated cases, but it leaves the patient always more or less anæmic and asthenic from the destruction of red blood corpuscles.

Principal symptoms.—These include headache, pains in the back and legs, sense of weariness, thirst, and anorexia

CHART 2.

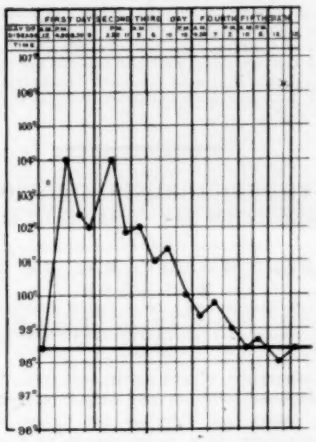


Tertian type.

with nausea. Tenderness over the liver and spleen. After the attack the patient often complains of great weakness.

Principal physical signs.—The enlargement of the liver and spleen is often marked. There is frequently vomiting and often the bowels are not properly opened or are even constipated. The pulse-rate is increased during the rise of the temperature and sinks below normal on the fall. The heart-sounds and the respiratory sounds are not altered as a rule.

CHART 3.



Complicated quotidian type.

Respiration is quicker than normal during the rise. The urine is febrile. The nervous system, even with high temperature, is little affected.

Mortality.—Without the malignant symptoms the death-rate is very low.

Prognosis.—Without complications and in an otherwise healthy individual the prognosis is good.

Treatment.—During the rise, antipyretics and if necessary cold applications and aperients; during the remission, quinine and some saline diaphoretic mixture; and after the attack, tonics. If the temperature is over 104° 10 grains of phenacetin with or without five grains of calomel and a hot lime drink are commonly given. Cold applications are necessary if the temperature refuses to react to drugs; as ice is difficult to obtain on the Gold Coast it is usual to resort to a brine bath—i.e., salt, vinegar, lime-juice, and Florida water are mixed with the water and the patient is either sponged with this, packed, or placed in the bath. The latter is at times dangerous owing to the shock which it produces. The saline diaphoretic mixture generally used is liquor ammoniæ acetatis in one-drachm doses, together with spiritus ammoniæ aromaticus, spiritus ætheris nitrosus, and a little syrup of orange. Quinine is often given in 10-grain or 15-grain doses twice a day, in the morning and in the afternoon. This, of course, is only given in the remission of the fever, and as soon as convalescence is established it is cut down to 10 grains once a day; then five grains once a day, next five grains every other day, and lastly, it is stopped after a little time. In the convalescence stage quinine is only given in the morning. In convalescence, in order to treat the anæmia and to improve the general system of the patient some tonic is necessary. A common prescription here is 10 grains of the citrate of iron and quinine with three minims of the liquor of strychnine hydrochlorate and a little syrup of orange for a dose. After repeated attacks of fever and the consequent anæmia a patient is invalided to either (1) the Government Sanatorium at Aburi, situate on the hills 26 miles from Accra at an elevation of 1440 feet and surrounded by beautiful gardens; or (2) a sea trip to Sierra Leone, Canary, or England according to his condition.

Prevention.—This is important and much can be done by using common-sense and obeying the ordinary rules of life and hygiene. Chills must be avoided and clothes should be changed if they get wet (this, however, is often impossible). Constipation and excesses can be avoided. Proper and sufficient food should be taken if it can be procured. Recreation and certain kinds of amusement can easily be obtained on the coast and often help to counteract mental worry. Possibly some alcohol should be taken to counterbalance the deleterious effects of a hot moist climate. If possible, Europeans should live in the good airy bungalows which are common on the coast and which have been built by the Government for officials, and should also be provided with mosquito nets, which I am glad to say are in general use. A little quinine in the damp cold weather or when wet or before a long trying march has been found useful. In my opinion persons have many times been prevented from having an attack of fever by being given a purgative and a few grains of quinine. As the country gets opened and as the forests are cut down and the swamps are drained by the gold-mining and other industries now beginning, the malarial fevers will, in my opinion, diminish, even as they have in the Fens and in Kent.

Accra.

ON THE DIAGNOSIS OF THORACIC ANEURYSM BY THE ROENTGEN RAYS.

BY HUGH WALSHAM, M.A., M.D. CANTAB., M.R.C.P. LOND.,

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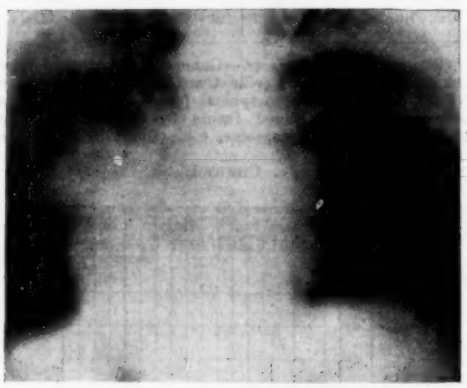
MANY aneurysms of the aortic arch can, of course, be readily diagnosed without any help from skiagraphy, but there are others, and they are not a few, in which the physical signs leave us in doubt between an aneurysm of the aorta and a mediastinal new growth, or the aneurysm may be unsuspected. In cases such as these the x rays come to our aid and I would emphasise the importance of examining such a case with the screen, because the pulsation of an aneurysmal sac can only be discovered in this way in an aneurysm buried deeply in the thorax. The following two cases, both of which came under my observation in the out-patient room at the City of London Hospital for Diseases of the Chest, are, I think, worthy of record.

CASE 1.—A man, aged 33 years, came to the out-patient room on April 19th, 1899. He gave the following history. He had had syphilis 16 or 17 years ago. 12 years ago his right elbow-joint was excised by Lord Lister in King's College Hospital. Five or six weeks before coming to the hospital he noticed a "cramp-like feeling" in the region of his heart which extended down his left arm. This sensation only lasted for a few minutes at a time but was severe. This lasted for two or three days and then disappeared. About the same time he noticed that he was getting short of breath on exertion. For a few weeks he had had a slight cough with frothy expectoration. He had never had rheumatism. On examination the heart's impulse was found to be in the fifth interspace in the left nipple line. In the third and fourth interspaces on the left side, three and a half inches from the mid-sternal line, there was a diffuse area of expansile pulsation over which a systolic murmur was audible. The aortic and pulmonary second sounds were clear. At the apex there was a systolic murmur following the first sound. The expansion of the left side of the chest was a little less than the right. The breath sounds all over the left side of the chest were a little weak. There were numerous crepitations to be heard over the left base behind. The pupils were equal and reacted to light. Both vocal cords moved well. The pulse was 72, regular and equal on each side. On May 3rd, 1899, he was admitted to the hospital under the care of Dr. Eustace Smith. The first skiagram (Fig. 1) was taken the day before his admission.

FIG. 1.



Showing the shadow of the aneurysm at the left base of the heart.

The chest is viewed from the back. The first point noticed is the very peculiar shape of the heart. The projecting shadow to the left of the base of the organ corresponded exactly to the pulsation felt on the chest wall. The shadow occupies the position of the left auricle. On a screen examination well-marked pulsation was visible in this projecting shadow. The diagnosis arrived at was that the patient had an aneurysm, and if aneurysms of the left auricle were not so extremely rare, there being, according to Dr. Wickham Legg,[1] only three or four cases on record, it might have been thought from the skiagram that the patient had an aneurysm of this chamber of the heart. The patient left the hospital of his own accord on June 1st, 1899, the physical signs remaining practically the same. A fortnight after, owing to palpitation of the heart, he went to the Middlesex Hospital and was admitted, remaining there for three weeks. After his discharge from the hospital he kept fairly well for five or six weeks. He attended again at the Middlesex Hospital for examination and was again admitted for six weeks. His condition remained much the same until the last week in November, 1899, when he fainted in the street.

[1] Dr. Wickham Legg: Some Account of Cardiac Aneurysms, Bradshawe Lecture, delivered before the Royal College of Physicians of London, 1883.

After this he came again to the City of London Hospital for Diseases of the Chest on Dec. 5th, 1899, and was re-admitted to the hospital under the care of Dr. Eustace Smith. On examination the physical signs were apparently the same as before but with the addition of a friction rub at the base of the heart. He informed me that the diagnosis of the physician under whose care he was placed when in the Middlesex Hospital was that he had an adherent pericardium. He was discharged on Jan. 18th, 1900. On April 7th, 1900, he came again to the out-patient room complaining that for the last few weeks his shortness of breath had increased. On April 12th, 1900, the second skiagram (Fig. 2) was taken, the interval between the two skiagrams being almost exactly 12 months. The chest is viewed from the front. It will

FIG. 2.

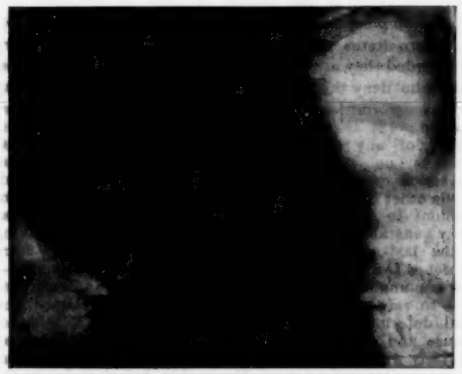
Showing the great increase in the aneurysmal shadow.

be at once seen that the shadow of the tumour at the left base of the heart has increased to more than double its original size. It also shows evidence of commencing dilatation of the right side of the heart. On a screen examination the pulsation in the sac was very distinct. I think the second skiagram leaves no doubt about the aneurysmal nature of the tumour. The patient is still under observation.

The second case is also of very great interest from a diagnostic and perhaps a prognostic point of view.

CASE 2.—A man, aged 42 years, came to the out-patient room on Nov. 29th, 1899. He gave the following history. He had never had any previous illness, being quite well up to 18 months ago when he began to suffer with shortness of breath on exertion which had gradually increased. He had had pain extending down the right arm. He also noticed that the veins on the right side of his neck were swollen. He had had a cough with slight expectoration but no hæmoptysis for 12 months. For the last two months he had been wasting rapidly, having lost nearly two stones in weight. Nine months ago he said that his face and neck were swollen but this swelling had now disappeared. On examination the superficial veins over the upper part of the right side of the chest and in the epigastric region were full and tortuous. There was no pulsation anywhere to be discovered. There was dulness to percussion with tracheal breathing all over the right side of the chest in front—the dulness extending a little to the left side at the level of the second costal cartilage. The dulness was also marked at the back of the chest on the right side but not so absolute The breath sounds over the left chest were normal. The heart's impulse was displaced downwards and outwards in the sixth interspace just outside the left nipple line. There was a soft systolic murmur following the first sound. The murmur was conducted towards the axilla. The pulse was weak, soft, and regular, and appeared a little weaker in the right radial artery. I was in doubt between an aneurysm and a new growth. The patient was admitted to the hospital on Dec. 13th, 1899, under the care of Dr. Eustace Smith. The first skiagram (Fig. 3) was taken on Dec. 7th, 1899. The chest is viewed from the front. It is at once seen that there is a large tumour occupying the right side of the chest and extending upwards nearly to the right clavicle and downwards to where it meets the shadow of the liver. It also extends a little to the left of the sternum at the level of the second costal cartilage on the left side. It seemed hardly possible that an aneurysmal sac could reach such enormous dimensions. I was therefore—taking into consideration the rapid wasting—in favour of a mediastinal new growth. The patient remained in the hospital until March 15th, 1900, and was discharged decidedly improved. He returned to the hospital

FIG. 3.



Showing the shadow nearly filling the right side of the chest.

the following month saying that although his breath was less short his cough had increased. On examination the physical signs were the same with the addition of rhonchi over both bases. The bronchial catarrh soon cleared up under treatment. Until June, 1900, the patient attended at the hospital once a month to report himself. The second skiagram was taken on April 26th, 1900, the interval between the two being very nearly five months. On comparing skiagram 4 (see Fig. 4) with skiagram 3 it will be seen

FIG. 4.

The shadow has now much contracted.

that the mass on the right side of the chest has undergone a certain amount of contraction, its shape being quite altered. This contraction of the tumour leaves now, I think, no doubt about its aneurysmal nature.

Since the above was written I have discovered an aneurysm of the descending thoracic aorta in a patient, by means of the Roentgen rays, which was unsuspected, the patient having been under treatment for intercostal neuralgia.

Harley-street, W.

UNIVERSITY COLLEGE OF NORTH WALES.—The half-yearly meeting of the court of governors of the University College of North Wales was held at Rhyl on Oct. 24th. Lord Kenyon was elected President in succession to Mr. W. Rathbone, who retired after 15 years' service. The financial report showed a deficit of £1604.

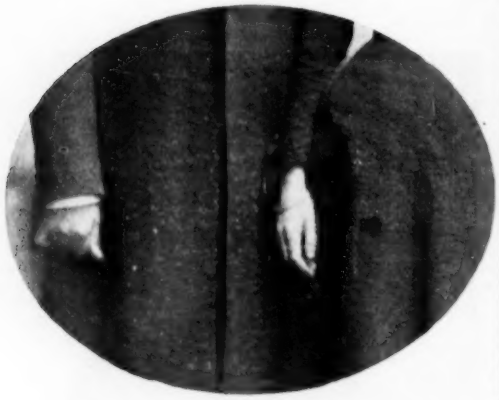
HAVE MATERNAL IMPRESSIONS ANY EFFECT ON THE FŒTUS IN UTERO?

BY WILLIAM DUNCAN, M.D. BRUX., F.R.C.S. ENG.,
OBSTETRIC PHYSICIAN TO THE MIDDLESEX HOSPITAL.

NOWADAYS it is the custom to scoff at the idea that maternal impressions during pregnancy can injuriously affect the unborn fœtus and when cases in support of the theory are recorded they are usually described as mere coincidences. Those who deny the influence of maternal impressions say (1) that deformities are rare but maternal impressions are common; (2) that deformities occur where there is no history of any maternal impression; and (3) that as there is no nerve-tissue in the umbilical cord no impression can be carried from the mother to the child. On the other hand, the belief in the power of maternal impressions to cause deformities in the fœtus in utero was pretty general in the medical profession up to the beginning of the last century; and even at the present day there are not a few medical men—myself amongst the number—who are unable in the face of many well-authenticated cases to refuse to believe that maternal impressions and fœtal deformities do sometimes stand in the relation of "cause and effect," even though it be impossible to say definitely what the *modus operandi* is. The case which I am about to relate is so extraordinary that I feel it due to the profession to publish it.

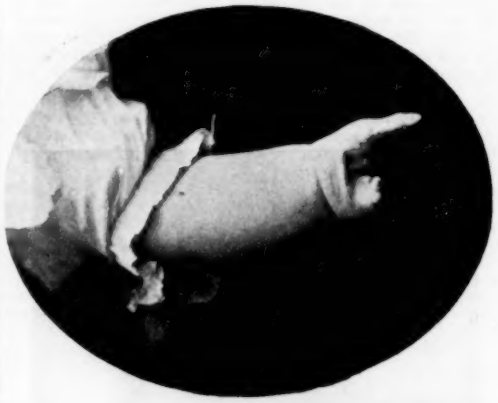
The wife of a medical man consulted me in 1898 for dysmenorrhœa and sterility. Finding an acutely anteflexed uterus I dilated the cervical canal, with the result that soon afterwards she became pregnant. When she was seven weeks pregnant her husband took her to the seaside and whilst there they were photographed together. (See Fig. 1.)

FIG. 1.



When the wife saw the photograph she exclaimed that her husband's "right hand looked deformed as if it had only a thumb and little finger." On frequent subsequent occasions she showed the photograph to friends, always pointing out the deformity to them. When the child was born—after a normal labour—the *right* hand was deformed as seen in Fig. 2, and the resemblance to the father's *right* hand, in comparing the two photographs, is sufficiently striking. Now comes a very remarkable occurrence. The nurse in charge of the baby whilst out walking one day showed the deformed limb to a neighbour who happened to be a few weeks pregnant. She was very shocked, but remarked, "What a lucky thing that both arms are not deformed." This woman was duly delivered of her first child at full term, and "*both its hands and feet were deformed.*" The mother was of a very nervous temperament. She often expressed her opinion that it was the shock of seeing the hand of my patient's child that caused her child to be born deformed. She would allow no one to see the child, although my patient's husband tried hard to get permission to have it photographed. She has since been removed to an asylum. Both of the children, apart from the deformity, are well developed and healthy. No previous cases of deformity can be ascertained as having occurred in either family.

FIG. 2.



In his presidential address to the Glasgow Obstetrical Society on Nov. 25th, 1891, Dr. George Halket[1] ably reviewed the whole subject of "infantile deformities and maternal impressions and emotions." He mentioned several recorded cases, three of which, as they are somewhat similar to that which I have just recorded, I may briefly quote.

In the first case an infant was born alive with the index and middle fingers wanting from one of the hands. The mother was a young woman who knew nothing of maternal impressions, but when she was told of the deformity of her infant she stated without hesitation that she had to work for some months after her marriage under a foreman who had lost two fingers through an accident; that the first time she saw his hand she had a shivering fit; and that every time she saw him she could not keep from thinking of his deformed hand. In the second case a patient in her first pregnancy was served daily with milk by a boy who had lost his middle finger, and as he handed her the milk she always noticed the absence of that finger. When her child was born the middle finger of one of the hands was wanting. In the third case a medical man narrated to a female friend who was in the early months of pregnancy, how one day a man was brought into his surgery with the right hand completely cut off by machinery. It made a marked impression on the lady who related the incident several times to friends. When her child was born it had only one hand.

Surely these cases show indisputably that maternal impressions have some effect in producing infantile deformity; and although the action cannot be explained pathologically I may end by saying (as Dr. Halket does): "There are more things in heaven and earth than are dreamt of in our philosophy."

Harley-street, W.

TONITE EXPLOSION AS A CAUSE OF DEATH.

BY A. S. MORTON, M.D. DURH.

ON August 18th, 1900, at 10.40 A.M., I was requested to go immediately to a man who was said to have been severely injured by some explosive. I went at once and on my reaching the spot I found that the man was already dead. The coroner for Ipswich ordered a preliminary inquiry at 4.45 P.M. on the same day, requesting me to give evidence but not allowing any post-mortem examination on that day.

[1] Glasgow Medical Journal, January, 1892.

I then gave the following evidence. The body was that of a man, about 37 years of age. He was fully dressed, his clothes were torn in places, and there was a large wound in the left thorax. I then stated that to the best of my belief death was caused by hæmorrhage and shock due to a wound of some internal organ by some explosive or other and that a probe passed into the body for its entire length in the direction of the heart, but whether that organ was wounded or not I could not say without a post-mortem examination. The jury requested a necropsy to be made, and this was done by order of the coroner on Sunday morning, August 19th, at 10 A.M. It was most carefully carried out by myself, together with the able assistance of Dr. A. W. Paterson of Ipswich, and in the presence of Mr. S. O. Eades. The clothes had been previously removed. There were a number of wounds of a more or less severe nature all over the front and side of the left half of the body. The right side had almost entirely escaped, as also had the head and face. There were a number of pieces of metal, varying in size from that of a shot-corn to about an inch in length, extracted from some of the wounds. The chief wounds were one which passed immediately below the seventh rib in a line with the axilla, allowing the insertion of the forefinger, and from which a piece of omentum was protruding; another hole was just above the middle of the left pubes from which gas was issuing, showing peritoneal perforation; there was a wound over the left deltoid at the top of the shoulder of about the size of a shilling; another wound about three inches long over the centre of the left biceps; also a wound about as large as the palm of the hand in front of the left upper forearm and corresponding to the area embraced by the median cephalic and basilic veins; the metacarpo-phalangeal articulation of the left thumb was torn open without fracture; and a piece of metal had perforated the left boot at the outer side and close to the toe-cap. This piece of metal had fractured the middle toe as well as injuring the big toe and the second toe. All the wounds of the outer surface of the body were peculiar in this respect, that the soft tissues were completely blown away—they looked as if eaten away by some animal. There was no blackening or discolouration of the surrounding skin, nor was there any smell of fire or of gunpowder, the skin looking perfectly clean and normal. The heart was normal and uninjured. The brain, the kidneys, and the spleen were all healthy and not damaged. The lower lobe of the left lung was perforated. This wound was a continuation of the wound under the seventh rib; it then passed through the diaphragm, then along the anterior superior surface of the stomach, which it perforated, and it also passed through the left lobe of the liver. The intestines did not appear to be injured. The clothes which the man had worn were full of holes; there was no smell of fire upon them nor was there any discolouration. The buckle of the left brace was broken and the broken portion was found in the body. Some of the blue material of a cloth coat was found, still undiscoloured, partly buried in the horn handle of a pocket knife.

It came out at the adjourned inquest on August 24th, that the Ipswich Regatta had been held on August 17th, when some fireworks and distress signals were exploded in the evening. It is supposed that one of the latter did not explode from some cause or other and that it fell upon the area of a timber-yard, where it was found on the following day and was examined by various workmen. How it exploded is still somewhat mysterious—that is to say, whether by percussion, by friction, by striking upon a cartwheel, by the application of a match, or by the production of a spark by means of a stone—as all of these methods were attested to by various witnesses. Captain M. B. Lloyd, H.M. Inspector of Explosives, who gave his evidence, stated that "the nature of the explosive which caused the deceased's death was what is known as a socket distress signal or a socket-sound signal. It was evidently, however, a defective one. Faulty manufacture, and many other things, would cause a signal not to explode. The inspector then went on to explain by means of a sectional dummy signal the exact nature, composition, and properties of it. To all intents and purposes it was a shell and was similar to those that were recently used in the artillery except that its envelope was not of so substantial a character. The flash of the discharge lighted a time-fuse which burnt for five or seven seconds and then ignited a charge of tonite, a very powerful explosive, making a report equal to a 15 or 20 pounder gun. The charge was sufficient to blast out rock to the depth of a yard."[1]

Some important questions were propounded at the inquest: "What is a firework?" "Was he a left-handed man?" (This was shown to be the case.) "Was his death due to the explosion or did someone else shoot him?" since shot was discovered by me in the body *before* the post-mortem examination. It came out subsequently that he had been shot some time previously in the same side and several shot-corns were extracted at the time of this injury. He had extensive adhesions of old left pleurisy and this prevented the complete collapse of the lung when perforated by the tonite explosion. "Was he able to walk a few—three or four—yards, and say good-bye to one or two of his old friends after so severe and mortal an injury?" The evidence of two or three of the witnesses proved that he was able to do so. "Could he have so walked and spoken without the old adhesions of his left lung, which prevented instantaneous collapse?"

Putney, S.W.

ARRESTED MENTAL DEVELOPMENT FOLLOWING DEPRESSED FRACTURE OF THE SKULL; TREPHINING; IMPROVEMENT.

BY ALFRED CLARK, F.R.C.S. EDIN.

ON July 10th, 1900, I was consulted in reference to a girl, aged 11 years, who had been for three years in an asylum because of "idiocy," accompanied by boisterous behaviour, which rendered her quite unmanageable at home. The patient, a tall and well-developed mulatto, who walked with a shambling gait, was brought into my consulting-room and demonstrated her high spirits by repeatedly pushing her mother off her chair, punching her on the chest and back, and pulling her hair, all with perfect good humour. She called me by her father's surname and evinced a strong desire to pull my chair from under me, for which reason my physical examination was limited and expeditious. I found a depression of the skull in the left occipital bone near the parieto-occipital suture and about two fingers' breadth from the middle line. It was about one and a half inches long and three-quarters of an inch wide. I had a fleeting view of the optic discs, which were normal, as were also the pupils.

The history of the case was that the child was bright and intelligent until the age of four years when she fell backward from a high chair and struck her head against the leg of the table. This injury was followed by "concussion of the brain" and on recovery she seemed all right except that about once a week she had a severe fit, which often lasted, according to her mother's account, for 12 hours, leaving her exhausted for a day or so afterwards. These fits were preceded by spasm of the right arm and leg. In time the mother noticed that the child's mental faculties were stationary and that she seemed to receive no new impressions of any kind. She called all strangers by names familiar to her before her accident and would, if asked where she lived, mutter something which her mother translated as being the address at which she had lived when she received the injury, although the family had removed several times since then. She could not be trusted away from her mother as she had a boundless genius for mischievous destruction.

On July 16th I operated. The nurse in attendance had had some very bad quarters of an hour preparing her for operation and was black and blue in her chest and arms from blows and pinches. I trephined over the seat of the depression and found the meninges enormously thickened and adherent. I opened the dura mater by a crucial incision and passed a trocar and cannula into the brain substance in several directions, but no fluid of any kind was obtained. I then cut away the exposed dura mater and separated the adhesions round the hole made by the trephine as well as I could with my finger. The disc of bone was not replaced and the scalp wound was completely closed by sutures.

Recovery from the operation was uninterrupted and from

[1] East Anglian Daily Times, August 25th.

that time until the time of writing (Sept. 2nd) there has been steady improvement in every way. The fits have never returned nor has there been any spasm of the arm or the leg. Her mental condition has so improved that she can be trusted to go shopping for trifles for her mother. She has been left in the house for hours at a time with only her younger brother—which, in my opinion, is a risky proceeding—and has been "as good as gold." She calls me "the doctor" and addresses other people by their right names. Her gait is no longer shambling. She amuses herself for a long time together by looking at pictures and she is learning the names of animals, &c., with the facility of an average child of four or five years of age.

Bitterne, Hants.

NATURE'S ALKALINE TREATMENT OF GOUT AND RHEUMATISM BY THE USE OF NATURAL ALKALINE THERMAL WATERS.[1]

BY CARL N. BRANDT, M.D.,
RESIDENT PHYSICIAN, HOT SPRINGS, VIRGINIA, U.S.A.

MY only excuse for attempting any addition to the already overdone subject of rheumatism and gout is that in an experience of a number of years in the treatment of these conditions solely certain clinical facts have been impressed upon me to so great an extent that I feel that the lessons learned by clinical work may be of some value to those of the profession who are called upon to deal with the subacute and chronic forms of so-called gout and rheumatism. To go into the theories that have been advanced in the past is not my purpose, but merely to try to show why and how results are obtained by the use of natural alkaline thermal waters, internally and externally, in a large number of cases where all other means had failed. That such is the case can, I am sure, be testified to by almost all the leading medical men of the day, and my only surprise is that they fail to understand how such results are obtained. No treatment gives rise to so much disbelief as the use of water as a therapeutic agent, and the idea that after the use of all the drugs, the so-called specifics, the alkalies, and the salines, relief should be given by the use of water is by many considered absurd, and the man who advocates such treatment is dubbed a fanatic. The profession, as a rule, may be said to be satisfied that the most approved treatment for these conditions is the so-called alkali treatment, and yet they express surprise that good results should be obtained by the use of alkaline waters. Have they ever stopped to consider that, after all, the so-called water cures or treatment for gout or rheumatism are nothing more or less than the alkaline treatment, differing only in the fact that the alkali is, on the one hand, supplied by the druggist, and on the other by nature? Such is the case. All the water cures for these conditions consist in the use of alkaline waters, not only internally, but also in the form of baths. The use of the alkaline waters is but one factor in the proposition. Another is that when properly used we have the application of the alkaline treatment under the best circumstances and with the best possible surroundings. Quite possibly the patient's physician at home will have laid the fullest stress upon the proper diet, exercise, mental rest, &c., that the patient is to have, in addition to the medication advised, but (and herein lies the kernel of the nut) the patient does not follow these instructions. He will take his pill or teaspoonful of medicine with absolute precision and regularity, but he has no time for exercise and dieting. After finishing his business and following his pleasure he may give these a half-hearted attention for a day or two, but there it, as a rule, ends. These are not conditions to be helped solely by medication. On the other hand, when taking a so-called cure he not only has his medicine—i.e., alkaline water internally and externally—but having no business to attend to, no pleasures to follow, his one occupation is to conscientiously carry out in every detail his *régime* as laid down for him by his adviser, who has him constantly under observation. Given, then, the alkaline treatment—i.e., in this case supplied by use of alkaline waters, good air, a carefully regulated diet, proper exercise, absolute cleanliness, free action of the skin brought about by the use of the alkaline baths, and free action of the kidneys and bowels due to the internal administration of the alkaline water—added to the knowledge which the patient has that he is doing that for his condition which is best, can any patient fail to improve?

The first clinical fact which has been impressed upon me is the absence of any clearly defined line of demarkation between the symptoms of cases which have presented themselves in which a diagnosis of either rheumatism or gout has been made. I have been unable to demonstrate to my own satisfaction any different pathological condition in these so-called diseases, the clinical picture in either case being practically the same. The diagnosis, it would seem, is most often settled by the exciting cause. On the one hand, if the initial attack followed exposure to cold, dampness, &c., we are most frequently told that it is a case of rheumatism. If, on the other hand, the primary attack was apparently induced by excesses at the table or by indigestion we are said to have a case of gout. The absence of difference in the symptomatology and pathology of the many cases which have come under my observation of so-called rheumatism and gout has led me to discard the terms "rheumatism" and "gout" and bring these conditions under the one general head of "uric acid toxæmia." My own belief being that in the absence of any clearly defined pathological condition neither rheumatism nor gout are true diseases, but are groups of symptoms arising from improper metabolism, or in other words, the effects produced by the retention in the system of the products of metabolism, or waste, I am strengthened in this belief by the observance of two clinical facts. First, that in all the cases which have come under my personal observation in which either a diagnosis of gout or rheumatism has been made, the retention of uric acid has always been readily demonstrated. Secondly, that immediately the free excretion of uric acid was brought about the symptoms have disappeared, irrespectively as to whether the diagnosis has been rheumatism or gout. My universal experience has been that on presentation the so-called case of rheumatism or gout is found to be excreting less than the normal amount of uric acid, and after being put under treatment this amount gradually increases, and with its increase a diminution of the symptoms. The amount of uric acid excreted under treatment is frequently found to be twice or three times greater than before treatment was begun, and then gradually diminishes until the normal mark is reached, at which it remains so long as the patient continues so to conduct his life and habits as will insure his maintaining a proper relation between waste and repair. The ground being taken that uric acid retention is the indication at least, if not the prime factor in the causation, of such a condition or conditions, which I name "uric acid toxæmia," it follows that the knowledge of the exact amount of uric acid daily excreted is most essential. The ordinary routine of instructing a patient to bring to his medical man "a bottle of urine," with no instruction as to amount or how and when the same is to be collected being given, is useless.

Neither a qualitative analysis nor a microscopic determination will suffice—the first owing to the fact that that particular portion of the daily amount of urine may contain a greater or lesser percentage or the entire output of uric acid; the second owing to the fact that the drop or drops examined may contain all or none of the crystallised uric acid present, and thus lead to error in judging the amount excreted. Obviously a quantitative analysis is necessary. My procedure is as follows. A thoroughly clean glass vessel large enough to contain the output of urine for 24 hours is given the patient, with instructions to collect all urine passed for the following 24 hours; he is also instructed to first empty the bladder whenever having a bowel movement, so that no urine may be lost. From this a quantitative analysis is made, no change of diet having been ordered up to this time. From the evidence gathered from this first analysis treatment is the following day begun, and the patient is instructed as regards diet, exercise, and the use of the waters. On the day following a second analysis is made, the treatment as regards diet, baths, &c., being changed in accordance with the results of uric acid excretion as shown by said analysis. Analyses are continued every two or three days throughout the treatment which is ended when the excretion of uric acid has reached the normal, the patient then being allowed to return to his home

[1] A paper read before the International Medical Congress at Paris, August 9th, 1900.

after having been instructed as to his manner of living so as to maintain a proper excretion of uric acid. A record of the amount of uric acid excreted is kept in each case from day to day, and on this record, as I have said, is based any change in diet, baths, &c. It is not claimed that the use of the alkaline treatment as supplied by nature is a specific, but that its employment, owing to the conditions by which it is surrounded, gives a larger percentage of good results. In my experience I may say that next to the internal administration of the alkalies and their external application in the form of baths diet plays the most important part, and by which Haig has shown and my own experience has proved uric acid excretion can be controlled. A dietary is to be carefully followed, not by any set rule to be applied to all cases alike, but by suiting the new diet to each patient in accordance with the indication as shown by the urinary analysis, remembering the importance of personal individuality.

The utility of the alkaline bath has been a vexed question, many practical men holding that there is no absorption of the mineral contents of the water, and many experiments have been made to prove this. My own experience leads me to believe that the taking of the alkaline baths alone will induce an increased uric acid excretion, my theory being that we here again have applied that old physical law of exosmosis and endosmosis, an acid condition of all the tissues, an alkaline medium—i.e., the bath—and an animal membrane—i.e., the skin—intervening. The alkaline treatment, as supplied by alkaline thermal waters, I use in the following manner. A patient is given a daily alkaline bath, varying in temperature from 90° to 105° F., for a period of from 5 to 25 minutes. He is given none but alkaline water to drink, a portion being taken on an empty stomach. He takes from two to four hours' active exercise daily and his diet is specifically ordered him. No form of alcohol is permitted, all the different factors of the treatment being regulated by the excretions of uric acid as shown by the analyses. The results in an experience of a number of years have been most satisfactory.

I would call attention to the following essential points in the use of alkaline water for the treatment of uric acid toxæmia: (1) frequent quantitative urinary analyses; (2) changing the diet, the amount of exercise, and the amount of water taken until there is a free excretion of uric acid; (3) the taking of sufficient exercise for the thorough oxidation of the foods taken; (4) the putting aside of all mental work; (5) a specific diet ordered, not depending upon the patient's knowledge as to what contains or does not contain the proximate principles which are to be avoided; and (6) to teach the patient what nature's laws are as pertaining to his health and well-being and how to follow them.

In conclusion, let me deny the statement that has so often been made that there is a great difficulty in making patients follow stringent rules. Such has not been my experience when I have had ability sufficient to impress them with the importance of these restrictions. This treatment, as I have tried to show, is in no way specific. It is not claimed that there is any magic in the waters used, but that it is merely an application and use of the recognised utility of the alkalies, augmented by the surroundings and conditions possible when the patient is so placed as to be constantly under the observation of his physician. The treatment is a rational one and a true exponent of the practice of physiology—a step I trust towards brushing away some of the mysteries which, unfortunately, have surrounded many medical measures. I hope in the near future that it may be said of our profession, "They practise physiology and not medicine."

Virginia, U.S.A.

THE WEDGE OPERATION FOR ENTROPION AND TRICHIASIS.

By H. HERBERT, F.R.C.S. Eng.,

MAJOR, I.M.S.; ACTING OPHTHALMIC SURGEON AND PROFESSOR OF OPHTHALMOLOGY, GRANT MEDICAL COLLEGE, BOMBAY.

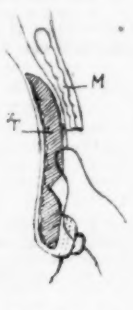
WITHIN the space of one and a half years, some years ago, I operated on 130 upper lids for entropion and trichiasis by Snellen's method, slightly modified, with excellent results. A large majority of the cases requiring it were those of combined entropion and trichiasis, some of them being very bad cases indeed. The ordinary Snellen's operation is insufficient for many of our old neglected cases, and success in these depends entirely on the observance of the details pointed out below. If the necessary rules are followed the operation is equally suited to the mildest and to the most severe cases, to trichiasis as well as to entropion. The ordinary operation consists simply in the removal of a wedge of tarsus with its overlying muscle, the necessary incision having been made through the skin, and the parts are adjusted by Snellen's suturing. The points on which I wish to insist are as follows:—

1. A strip of skin two millimetres or more broad should be cut away, at least in all bad cases, unless the skin be contracted and scanty. Otherwise it is redundant afterwards and the upper lip of the wound tends to overhang the lower. It lends to no shortening of the lid beyond that produced by the excision of tarsus.

2. (*a*) The depth of the tarsal wedge removed should in all cases be sufficient to divide completely the tarsus. If the conjunctiva be penetrated in places no harm results. The whole thickness of the tissue being divided it is found that the conjunctiva and subconjunctival tissue are sufficiently loose or extensile to permit of very considerable displacement as well as rotation of the lower segment of tarsus, which carries with it, of course, the border of the lid. (*b*) The breadth of the wedge at its base depends largely on the degree of entropion existing. When the lower portion of the tarsus is much thickened and bent the rounded swelling of its anterior surface renders it an easy matter, and indeed almost imperative, to remove a broader wedge than usual. But in some of the older cases of entropion the tarsus is much contracted vertically and the thickening involves the whole or greater part of it. Care has to be taken in these cases not to remove too much or the wedge may easily be made to include the greater portion of the tarsus. (*c*) The position of the wedge is important. The strip taken should be as near the free margin of the lid as possible—i.e., immediately above the roots of the eyelashes. Thus we have quite a narrow strip of tarsus left below and a comparatively broad plate above, so that when the anterior surfaces of the two are drawn together any displacement which may occur will be in the lower and not in the upper piece. The broad plate above affords a fixed basis from which one can work on the more readily moved and more readily moulded narrow marginal strip, with sutures.

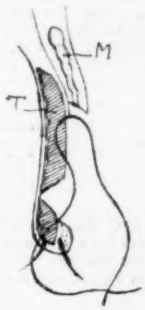
3. It is in the suturing that Snellen's operation most distinctly fails to make the most of its opportunities (Fig. A.) The sutures should be entered as in Green's operation. The curved needle is to be introduced a little behind the most posterior lashes, wherever they may be situated, and passed obliquely forwards and upwards, to be brought out immediately above the lower

FIG. A.



Snellen's suture.
M is muscle.

FIG. B.



Modified suture.
T is tarsal cartilage.

margin of the skin wound. Thus the more the trichiasis or districhiasis the further back will the point of entry be, and when the sutures are pulled upon the more will the border of the lid be brought forward. (Fig. B.) The needle should then be passed into the anterior surface of the upper piece of tarsus distinctly above the cut surface, and brought out again after taking a firm hold; neither skin nor muscle is taken up. Introduced into the tarsus thus the sutures when tightened have distinctly more effect in bringing the eyelashes forward than when introduced "through the upper lip of the tarsal loss of

substance."[1] The lower tarsal segment, with the lid border, tends to be drawn up on to the anterior surface of the upper segment. Three such sutures are enough, tied in the ordinary way. It is quite unnecessary to tie them tightly. The parts must be simply retained in position and not pulled forcibly into position by the sutures. I have not had any sloughing of the lid margin; but it must be very easy to produce it by tying the sutures tightly. The two end-sutures (of the three) require particular care in the tying, as the parts are apt to be held in their original position by the clamp. Two other sutures, passed through skin only, suffice to bring the edges of the skin wound into close apposition.

One of the main advantages of the operation is its inherent adaptability to the needs of individual cases. Well-developed entropion brings its own remedy in the broader wedge taken, and bad trichiasis or districhiasis insures an application of the sutures which increases the displacement and rotation of the lid border. Its effect is permanent, except in cases where untreated trachoma again leads to cicatricial contraction. The shortening of the lid is slight and of no account in the great majority of cases. In bad cases there is apt to be a depressed line of scar left unless care be taken that the edges of the skin wound are in accurate apposition.

Bombay.

Clinical Notes:

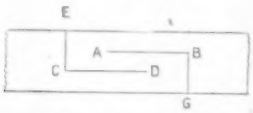
MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

LENGTHENING THE TENDO ACHILLIS.

BY R. A. HIBBS, M.D.

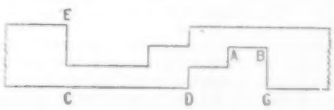
ON March 16th, 1900, at a meeting of the Section on Orthopædic Surgery of the New York Academy of Medicine, I presented five patients affected with talipes equino-varus, the result of infantile paralysis, on whom I had performed a new operation as follows. The tendo Achillis having been exposed by a parallel incision one and a half inches in length, made to its outer side, it was cut transversely within half an inch of its insertion, through two-thirds of its substance, and with the turned knife it was then split upward a certain distance. A quarter of an inch above the end of the longitudinal cut another transverse cut was made from the opposite side through two-thirds of the substance of the tendon, and the knife being turned the tendon was again split to within a quarter of an inch of the first transverse incision. Thus the tendon was severed in such a manner as to secure its lengthening and at the same time to preserve its continuity. In Fig. 1 the first transverse cut would be

FIG. 1.



from E to C, the first longitudinal from C to D, the second transverse from G to B, and the second longitudinal from B to A. When traction was applied lengthening would occur as shown in Fig. 2, and it would be equal to the sum of the two

FIG. 2.



longitudinal cuts minus the sum of the two laps of a quarter of an inch each. In Fig. 1 if C D is half an inch, B A half an inch, A to E C quarter of an inch, and D to G B quarter of an inch, then the lengthening would be half an inch plus half an inch minus quarter of an inch plus quarter of an inch, or one inch minus half an inch, or half an inch. It was a matter of choice whether the longitudinal or the transverse cuts were made first, but it was important that the skin incision should be to the outer side of the tendon in order to prevent the scar from falling directly over the tendon which might be rubbed by the shoe. Since operating by this method I have learned that it had already been practised in a case of traumatic talipes equinus by Sporon, a Danish surgeon.[1]

CASE 1.—In a girl, aged eight years, a short tendo Achillis had prevented flexion of the right foot within 10° from a right angle. It was lengthened by this method on Sept. 22nd, 1899, and the foot was fixed at a right angle. In two weeks slight voluntary motion was allowed and the muscle received daily exercise with some resistance from the attendant. After half an inch lengthening had been secured there was positive resistance to any further flexion of the foot than was allowed by the lengthening. The child walked with strong control of the os calcis.

CASE 2.—In a girl 12 years of age flexion of the left foot was impossible within 15° from a right angle. The tendon was lengthened three-quarters of an inch on July 6th, 1899. With suitable after-treatment the result was an excellent position of the foot with strong action of the muscles of the calf.

CASE 3.—In a girl aged 14 years flexion of the right foot was prevented within 10° from a right angle. The tendon was lengthened one and a quarter inches on June 16th, 1899, an unusual amount in order to relieve extreme valgus, with resulting good control of the os calcis. As the valgus was recurring a tendon grafting would be done.

CASE 4.—In a girl eight years of age the left foot was inflexible within 45° from a right angle, appearing to be almost in a straight line with the leg. The tendon was lengthened one and three-quarter inches on June 16th, 1899, and the foot was fixed at a right angle. It was believed that an ordinary tenotomy would have been followed by loss of usefulness of the calf muscles. It was seen, however, that their action was excellent.

CASE 5.—In a girl 14 years of age the right foot had been inflexible within 15° from the right angle and the tendon was lengthened three-quarters of an inch on June 16th, 1899, and the foot was fixed at a right angle. The muscle and the tendon showed enough strength to sustain the weight of the body on tip-toe and this had been true of all the cases presented. In no case had an effort been made to correct the talipes equinus beyond a right angle. Further correction might be desirable in congenital equinus but not in acquired equinus.

That the strength of a tendon lengthened in this way was not seriously impaired was proved by the observation that in every case there had been resistance to the carrying of the flexion beyond the limit allowed by the operation and also by the ability of the muscle and tendon to sustain the body on tiptoe. The process of repair had been rapidly completed after operation by this method, which presented obvious advantages over those in which sutures were applied to the tendon. But the greatest advantage had been found in the readiness and certainty with which the desired amount of lengthening could be exactly secured. A perfect gait required the "spring" or elastic quality imparted by the muscles which enabled the anterior part of the foot to sustain the weight of the body in walking. Without this power the gait would be that of one who had a wooden foot or a foot affected with talipes calcaneus. In talipes equinus following infantile paralysis it was probable that the muscles were more shortened than the tendon, and as lengthening the muscle was generally impossible operative relief had to be sought by lengthening the tendon. In operating, however, it was important, on the one hand, to avoid leaving the tendon so long as to impair the action of the muscle and, on the other hand, to avoid leaving it so short that the equinus would not be sufficiently overcome. This method enabled the operator to maintain exactly the proper relation between the length of the tendon and that of the muscle. By subcutaneous tenotomy the equinus was readily corrected, but in many cases the result was a serious defect in the gait from undue lengthening of the tendon and resulting shortening and inefficiency of the muscle.

New York.

[1] Swanzy's Handbook of Diseases of the Eye, p. 166. This is the common description. Fuchs in his text-book directs the hold on the upper piece of the tarsus to be taken through its upper border—i.e., distinctly above the tarsal wound, as it should be.

[1] Hospitals Tidende, third series, vol. ix., No. 50, 1891.

IMPETIGO FOLLOWING VACCINATION.

BY JAMES JOSEPH HARDING, L.R.C.P. & S. IREL.

ON March 19th, 1900, a recruit in the 17th Lancers was revaccinated by me with calf lymph supplied by the Army Vaccine Institute, Aldershot. On the eighth day he attended for inspection. His arm from the shoulder to the elbow was red, swollen, and weeping. On inquiry I found that his father and sister had suffered from a skin disease and he himself had had a previous attack of eczema. I admitted him to hospital, placed him on a milk diet, and treated him as prescribed. In a few days his whole body was covered with an impetiginous eruption, the majority of the pustules reaching nearly the size of a threepenny-piece. On microscopical examination staphylococcus pyogenes aureus was found in abundance, together with a limited number of streptococci. For some days his temperature ranged from 100° to 101·5° F. His tongue was coated with a white fur and he felt generally out of sorts. On the fifteenth day of admission the pustules had dried up and the scales fell off, leaving behind a healthy surface which healed rapidly.

As four other recruits were vaccinated by me at the same time, and with no ill effect, under precisely similar conditions and with the same lymph, it is perfectly evident that this man's attack was not attributable to any impurity in the lymph supplied. The cause, however, was not far to seek. His shirt, which was dirty, had chafed the wound and had opened a door for infection in a susceptible subject. There is nothing of special interest in this case to merit publication except the fact that it is on cases of this nature that the anti-vaccination argument is founded. Many of those who fear vaccination no doubt honestly attribute to the lymph results which are in reality due to a want of care and cleanliness on the part of the individual vaccinated.

Ballincollig, Co. Cork.

PUTTEE PARALYSIS (?) AFTER ENTERIC FEVER.

BY JOHN WILLIAM SPRINGTHORPE, M.A., M.D., B.S. MELB., M.R.C.P. LOND.,

PHYSICIAN TO THE MELBOURNE HOSPITAL; LECTURER ON THERAPEUTICS, ETC., TO THE UNIVERSITY OF MELBOURNE.

THE patient was an officer invalided from South Africa. After passing through an attack of enteric fever he suffered from numbness, without actual pain, in the dorsum of each foot, which was followed by complete inability to raise the toes and partial inability to evert the feet. The right foot had, however, already recovered. When first seen by me the patient walked fairly well, but he dropped and dragged the toes of the left foot. He stated that he had been told that he was suffering from peripheral neuritis after enteric fever, that a great many of the soldiers had been similarly affected, and that the complaint was known amongst the men as "enteric feet," and that, so far as he could learn, it was confined to those who had had an attack of enteric fever. Examination disclosed marked wasting of the tibial muscles of the left leg, with apparent wasting of the peroneal and extensor muscles also. The muscles reacted to the faradaic current, but with a noticeable weakness. Those on the right leg showed no present difference or abnormality. There had been no implication of the calf muscles and there was no present tenderness on pressure over the nerve trunks in that region. Under faradaism and massage the muscles rapidly regained their normal reactions and their action at the time of writing has become practically perfect. The trouble was thus confined absolutely to the muscles and surfaces supplied by the peroneal nerve, the musculo-cutaneous branch of which supplies the peroneus longus and peroneus brevis, together with the dorsal surfaces of the foot and toes, whilst the anterior tibial branch supplies the tibialis anticus, the long and short extensors of the toes, and the long extensor of the big toe, as well as the dorsal surfaces of the inner toes. But peripheral neuritis after enteric fever is in Australia very uncommon and when it does occur it is not limited in this strange manner, but, as in alcoholic neuritis, is apparent rather along the main nerve trunk within the calf muscles. On the other hand, this implication of the peroneal nerve suggested injury, and when symmetrical, bilateral pressure as the probable cause. Such a cause is at once suggested in the puttees used so extensively and indiscriminately by the soldiers in the South African campaign. On being asked the patient stated that the last few rounds of the puttees were fastened rather more tightly than elsewhere directly over the head of the fibula, and thus pressed the peroneal nerve against the bone. The long marching, the rapid tense movements of the legs, especially when infantry soldiers became mounted, had in his case made itself felt in the region referred to. Unfortunately, he could give no exact information as to the details of the cases; what proportion of the different corps were affected; whether it was most in those using puttees for the first time, or in those subsequently mounted, &c.; and he was not certain even that it was confined to cases that had contracted enteric fever. His case, however, and his general statement strongly support the theory that this limited paralysis resembles "crutch paralysis," and has as a prominent factor in its causation the intermittent and at times severe pressure of the puttees upon the peroneal nerves. If it be confined to cases of enteric fever it is probable that the toxin of that disease finds in the benumbed peroneal nerves a weak spot, and is thus able to produce a neuritis where it would not otherwise occur. If so, this is apparently the first account of any such causation and it is thus of special interest. In any case it deserves further investigation at the hands of those who have had to deal with these instances of "enteric feet," or, as I would prefer to call the affection, "puttee paralysis."

Melbourne.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. MARY'S HOSPITAL.

A CASE OF REMOVAL OF THE ENTIRE UPPER EXTREMITY (INTERSCAPULO-THORACIC AMPUTATION) FOR ULCERATION AFTER BURN; RECOVERY.

(Under the care of Mr. EDMUND OWEN.)

BERGER'S operation for the removal of the entire upper extremity is indicated when malignant disease affects extensively the upper end of the humerus or the scapula, or when there is insufficient covering for an amputation at the shoulder-joint. The chief reasons against the operation are the risk of shock and the danger of hæmorrhage. The difficulty in finding the subclavian artery mentioned in the following case was experienced also by Mr. C. Macnamara[1] in this operation. For the notes of the case we are indebted to Mr. C. de Morgan and Mr. G. French.

A married woman, aged 28 years, was admitted into the Lilian Holland Ward at St. Mary's Hospital on Dec. 28th, 1899. She said that in August, 1898, whilst filling a paraffin stove her blouse caught fire and that in spite of careful treatment by her medical man the resulting wound refused to heal. Examination showed that the right upper extremity was occupied by a granulating surface which extended from the shoulder-blade to the roots of the fingers, the right axillary and mammary region being involved in like manner. The discharge from the ulcerated surface was so free that the bulky dressings were soaked through each morning. The urine was healthy. The burn had evidently involved the muscles and the hand lay uselessly by the patient's side. Local applications and graftings were tried without avail, so in the second week of February, 1900, Mr. Owen asked Mr. A. J.

[1] THE LANCET, May 11th, 1878, p. 689.

Pepper to see her with the view of advising an interscapulo-thoracic amputation. This being agreed upon, and the aspect of affairs being fully explained to the woman and her husband, the operation was performed on Feb. 15th. A stimulating enema having been given and ether having been administered the clavicle was sawn across in its inner half and the vessels were tied with silk. In the shaping out of the flaps all the skin of the acromial and pectoral regions that was unimplicated in the ulceration was saved, and when it had been raised the pectoral muscles, the serratus magnus and latissimus dorsi, the levator anguli scapulæ, rhomboids and trapezius, and the cords of the brachial plexus were divided, and the "part" was taken away. Bleeding vessels were secured as they showed themselves, and without any waste of time the flap was adjusted and sutured, bulky dressings were applied with compression, and the patient was taken back to her warmed bed. She was much collapsed in the evening, but at once answered to the injection into the veins of a quart of hot saline solution which was promptly given by Mr. G. D. Maynard, the house surgeon. She made a rapid recovery and when she visited the hospital a month or two later she looked extremely strong and healthy; moreover, she expressed herself as being well satisfied with the result of the treatment which she had undergone.

Remarks by Mr. OWEN.—As a rule the interscapulo-thoracic amputation is performed for malignant disease, and especially in cases of recurrent mammary scirrhus where any less extensive operation cannot be resorted to. Mr. F. Treves has also done it for gunshot wound in South Africa. I am not sure but that this is the first report of the operation being resorted to for the cure of a patient with intractable ulceration after a burn.

The woman had a narrow chest of what Sibson called the "expiratory type," and the experience which I met with during the operation suggested that if I were describing the steps of the operation in a work on operative surgery I should insert a few lines to this effect, that in a thin, narrow-chested subject—and especially when the arm has been long hanging by the side—the subclavian vessels as they rest upon the first rib must be sought for at a very considerable distance above the level of the clavicular incision. Indeed, in my case I found that I could best reach them by making a vertical incision up into the root of the neck.

MONSALL FEVER HOSPITAL.

A CASE OF PNEUMONIA (DOUBLE); EMPYEMA; ABSCESS IN THE ABDOMINAL WALL.

(Under the care of Dr. R. W. MARSDEN.)

AT the Carlisle meeting of the British Medical Association the late Mr. William Anderson drew attention to the surgical importance of the sub-peritoneal space. He showed that it was a frequent site for new growths, and that in it formed many abscesses, such as the remarkably extensive one which is described below. In that case the septic infection probably came primarily from the empyema or the pneumonia, and made its way through the diaphragm, perhaps by one of the normal openings in that muscle; it then found itself in the sub-peritoneal space, where it spread easily amongst the soft areolar tissue.

A girl, aged 11 years, was admitted into the Monsall Fever Hospital on June 13th, 1900, with signs of pneumonia at both bases. The history stated that she had been ill for three weeks commencing with headache, and that she had subsequently frequent vomiting and diarrhœa. The temperature was 104·4° F. on admission and during the next three days it fell by lysis to 100°. As the spleen was enlarged to percussion and palpable a diagnosis of enteric fever complicated by double pneumonia was made, but an examination of the blood serum for Widal's reaction gave a negative result. In the meantime the pneumonic signs at both bases had spread over a larger area, and by June 20th, as a marked remission in the temperature had occurred on three consecutive mornings and as the percussion note at the bases gave the impression of increased solidity, a diagnosis of early empyema was made, but since the bronchial breathing at each base was loud and clear, an exploratory puncture was deferred. Between June 20th and 29th the morning temperature averaged 99° and the evening temperature 103°, and the physical signs at the bases seemed to be quite at a standstill. The patient complained, however, of abdominal pain, which was thought to be of pleuritic origin, since though the abdomen was full and somewhat tense, with a girth at the umbilicus of 20½ inches, there was no tenderness or hardness and percussion revealed no unusual want of resonance. It was, however, noted that respiration was of the costal type.

As the patient seemed to be rather worse an exploratory puncture was now made into the right pleural cavity posteriorly, and a syringeful of yellow, creamy, non-odorous, thick pus, of uniform consistence and free from lymph particles, was withdrawn. From the left base also a few drops of purulent material were obtained. Accordingly a piece of rib was removed from the right side, but only two ounces of pus with the characters above mentioned were evacuated. Up to July 3rd the remissions were daily becoming less, and their continued presence was attributed to a small quantity of pus in the left pleura. On the evenings of July 3rd and 4th the temperature was 102·4° and 103° respectively, and on the morning of the 5th the patient was very decidedly worse. During the preceding night she had passed six watery brown stools and had vomited frequently. (It should be mentioned that on two previous occasions—viz., June 20th and 27th—she had vomited, and that throughout the period of observation in the hospital, though the bowels had acted on an average once daily, yet the stools had been very variable in consistence.) She was now lying with her legs flexed upon the abdomen; there was, however, no pain on palpation and no sign of hardness or localised fulness, but a general feeling of tenseness and elasticity. The dulness of the liver and spleen was quite distinct, and percussion of the rest of the abdomen gave a perfectly resonant note. Measurement of the abdomen at the umbilicus showed an increase to 22½ inches, and fluctuation could be obtained from one side of the hypogastrium to the other, but not when pressure was made in the middle line.

Though unable to diagnose the condition of the abdomen, as the patient was so much worse it was decided that exploration was indicated. Accordingly an incision was made in the middle line below the umbilicus. Immediately the sheath at the posterior surface of the rectus abdominis was divided thick yellow pus with the characters already described began to well up into the wound. On inserting the finger it was evident that the pus proceeded from a shallow space between the peritoneum and the transversalis fascia. The outlines of this space could not be determined though a probe was passed almost to the costal margins above and to the extreme flank on each side. No less than 35 ounces of pus were measured, and by inserting a large drainage-tube from the central incision to a counter-opening in each flank, a free exit for the remainder was provided. The patient immediately began to improve and ultimately left the hospital on Sept. 11th, 1900.

Remarks by Dr. MARSDEN.—The uniform distribution of such a large quantity of pus over the front of the abdomen gave so little alteration in the usual physical signs that I have to confess that I did not suspect its presence in that situation, and it is especially on account of the consequent possible difficulty in diagnosis that I have thought the case worthy of record. As regards its origin I am of opinion that it was subsequent to the double pneumonia, both from the course of the disease and the character of the pus, but as I have not previously seen or heard of such a condition, I should be pleased to have information from any readers of THE LANCET who have had a similar case.

BIRMINGHAM GENERAL HOSPITAL.

TWO CASES OF "TRAVELLING" FOREIGN BODY.

(Under the care of Mr. T. F. CHAVASSE.)

IN the Mirror of Hospital Practice in 1898[1] we published an account of a case in some respects resembling the first of the two cases described below; a piece of steel passed from the stomach into the subcutaneous tissue of the abdomen whence it was removed by Mr. John H. Morgan. In Mr. Chavasse's case the shawl-pin probably perforated the wall of some part of the small intestine. For the notes of the cases we are indebted to Mr. R. E. Sedgwick.

CASE 1.—A girl, aged three years, was admitted to the

[1] THE LANCET, Feb. 5th, 1898, p. 365.

Birmingham General Hospital on May 28th, 1900, with a history of having two months previously swallowed a brass shawl-pin. She complained of abdominal pain on movement, and on examining the abdomen a definite tumour of about the size of a hazel-nut could be felt, half an inch outwards and downwards from the umbilicus on the left side. This was painful on pressure and on deep expiration. A long pin, with its head pointing upwards, was seen when the child's abdomen was examined with the fluorescent screen. On June 1st Mr. Chavasse made a small incision over the tumour and at half an inch from the surface came upon dense fibrous tissue surrounding a small collection of pus, in which the pin was lying. The pin on extraction was a large brass shawl-pin two and a half inches in length. The child made an excellent recovery and was discharged from the hospital ten days later. At no time was there any trace of fæcal matter, although the pin had apparently ulcerated through the intestine into the abdominal wall.

CASE 2.—A man, aged 23 years, was admitted into the Birmingham General Hospital on August 7th, 1900, with a red œdematous swelling over the front of his neck in the middle line, extending over the sternum for two inches. He had some pain and difficulty in swallowing and a slight degree of fever. His history was as follows. Some five weeks previously, while going fishing, he "got something in his throat which almost choked him, but which passed away after five or six minutes." Three days later his throat became sore and he attended the hospital and was given medicine and gargle which relieved him. Five days previous to admission his throat began to swell and had gradually increased. An incision one and a half inches long was made in the middle line below the level of the cricoid cartilage. No pus was found although Hilton's method was extensively used. Hot boric fomentations were applied and two days later a fair amount of thin pus was discharged and his temperature fell to normal. The swelling went down and the incision healed, except a small sinus, which continued to discharge from 15 to 20 minims of pus a day. He went out, the sinus continuing in the same condition till Sept. 22nd, when on squeezing it the husk of an oat was discharged. The sinus closed three days later. This husk had apparently got caught in the larynx, possibly in the ventricle, and had ulcerated through into the tissues of the neck, to be finally discharged through the skin.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

Exhibition of Cases.

A MEETING of this society was held on Oct. 26th, Sir R. DOUGLAS POWELL, the President, being in the chair.

The new arrangements for the exhibition of cases, referred to in a previous number of THE LANCET, were adopted for the first time on this occasion.

Mr. J. JACKSON CLARKE showed a male patient, aged 56 years, from whom one and a half years ago he had removed the greater part of the Rectum and a Cancerous Growth by a modified Kraske's operation. The circumstances of the operation necessitated leaving the lower part of the bowel open in the mid-posterior line. To remedy the incontinence thus caused Mr. Clarke, four months ago, closed the gap by a plastic operation, the chief features of which were: (1) freshening and completely freeing the bowel; (2) denuding the surface to the left of the gap by dissecting off a strip of skin and fat; and (3) making an ample skin-flap on the right side of the gap and fixing the middle of this flap by deep mattress sutures to the sacro-sciatic ligaments of the left side and its edge to the left edge of the denuded surface. The operation had answered its purpose perfectly. The patient was now in good health and free from any sign of local or metastatic recurrence of the original growth.—Mr. CHARTERS J. SYMONDS congratulated Mr. Clarke on the admirable results achieved and suggested that an illustration and diagram of the case should be added to the description of the operation for the Transactions of the Clinical Society.

Dr. J. WALTER CARR exhibited a case of Myositis Ossificans Progressiva. The patient was a boy, aged seven years. The symptoms were said to have been noticed only eight months and the patient had been under observation for five months, during which time the disease had made very little progress. There was extensive ossification of the dorsal muscles, of the pectorals, the latissimus dorsi, the biceps, and the left rectus abdominis. The back was almost rigid, the movements of the shoulder and elbow-joints were greatly restricted, and respiration was mainly diaphragmatic. There were exostoses on each side of the forehead (following upon falls), on the second finger of the right hand, just below the inner side of the head of each tibia, on the left internal malleolus, and on the proximal phalanx of each great toe. Beneath the skin below the spine of the left scapula was a flat piece of bone over two inches long. The great toes were, as usual in these cases, shortened and turned outwards, and only one phalanx could be felt in each. The thumbs were normal.

Mr. HERBERT TILLEY exhibited a case illustrating the Radical Cure of Chronic Frontal Sinus Empyema. The patient was a female, aged 50 years, who had complained of purulent discharge from the left nostril of five years' duration, with occasional attacks of severe frontal headache, "dryness of throat," and unpleasant taste and smell. When she came under the care of Mr. Tilley in April, 1900, the left nasal cavity was full of polypi bathed in pus. These were removed. Exploration of the maxillary antrum showed a small quantity of pus present and this was drained by the alveolar method. The anterior half of the middle turbinal was next removed, followed in the course of 10 days by external radical operation upon the frontal sinus. The patient left the hospital quite cured 21 days after the operation. There was no discharge from the sinus at present and the case showed how very unnoticeable was the external scar, although practically all the anterior wall of the sinus had been removed.

Dr. STCLAIR THOMSON exhibited a man, aged 40 years, with Growth of the Left Tonsillar Region. It was first noticed in June last. The anterior pillar of the fauces on the left side was occupied by a new growth which spread in various directions. The margin was well defined. The surface was flat and irregular and did not feel hard to the finger. There were no enlarged glands and no pain; the tongue was protruded easily, although the growth had affected its base. There was no history of specific infection and the condition had been unaltered by the administration of mercury and iodide. (A section was exhibited under the microscope.)—Mr. TILLEY suggested applying salicylic acid to the papillæ (which were the seat of a curious horny change) in the same way as to a corn. It would probably be efficacious.—Mr. CHARTERS SYMONDS expressed the view that the growth beside the tonsil was an epithelioma in spite of the small amount of infiltration. He had seen similar cases where the growth appeared like a plaque and was only just visible to the laryngoscope. He did not think it would be possible to completely eradicate the growth without removal of the upper jaw. Caustics would not be of any use.—Mr. JACKSON CLARKE was decidedly of opinion that it was epitheliomatous and should be removed at once.—Dr. STCLAIR THOMSON, in reply, said that the case was somewhat atypical. Tuberculosis had been suggested as a diagnosis. He had watched the case for three months but had not come to any conclusion as yet.

Dr. PERCY KIDD exhibited a case of Hæmophilia with Disease of the Knee-joint (with Radiographs). The patient was a fairly healthy-looking boy, aged six years, a "bleeder" and a member of a "bleeder" family. There was considerable swelling of his right knee-joint, mainly due to enlargement of the articular ends of the femur and tibia, as demonstrated by the radiographs. On admission to hospital on July 7th, 1900, the joint was swollen, hot, and tender, and the skin over it was red and shiny. There was no definite fluctuation but a vague crepitus could be recognised on manipulation. Numerous bruises were seen on various parts of the body as the result of slight injuries. During the first fortnight there was an irregular remittent pyrexia (from 103° to 99° F.), but since then the temperature had been normal. With rest in bed and application of splints the pain and tenderness of the joint disappeared and the swelling diminished. There was a history of injury to the joint five days before admission. Profuse bleeding from slight cuts and injuries had occurred repeatedly from an early age.—Dr. A. E. SANSOM remarked that it was not unusual to find joint affection with hæmophilia but its nature was obscure. Sometimes it was thought to be rheumatic and sometimes tuberculous. In this case there was at the present time no

evidence of blood effusion though the joint mischief had probably arisen in this way. The future of this case was an interesting point. Judging by others that he had seen he thought that the joint would get quite well. He referred to the case of a man, now about 30 years of age, who had almost entirely outgrown his tendency to bleed. Hæmophilia in the female line was of less importance than when it was handed down through the male ancestors.—Mr. CHARTERS SYMONDS thought that this joint was probably the seat of tuberculosis. There was evidence of commencing destruction and the enlargement was more apparent than real because of the rotation of the joint. There were also nodosities on the condyle of the femur. If the joint was tuberculous it raised the question of operation.—Dr. KIDD, in reply, said that there was a typical family history of bleeding. The question of tuberculous disease had been raised, but the skiagram showed that there was definite bone enlargement. Regarding operation this would be somewhat risky. The lad's finger had recently been pricked for examination of the blood and great difficulty was experienced in checking the hæmorrhage. The red corpuscles were 6,000,000 to the cubic millimetre and the leucocytes were also increased; the coagulability was diminished so far as they could tell, but it was impossible to get good results with Wright's coagulimeter.

Mr. G. R. TURNER exhibited a case of Intractable Ulceration of the Lips and Palate occurring in a joiner, aged 58 years, which had lasted for six months. Eighteen years ago the patient had had a chancre and he had lost flesh lately. There was no redness around the ulcers and no induration, and the ulceration was very irregular in its distribution. No enlarged glands could be felt. He had not improved with mercurial powder locally and iodide of potassium internally. The growth was not thought to be malignant, syphilitic, or tuberculous. It had made slight improvement under arsenic. Dr. H. D. Rolleston had reported that there was microscopically no evidence of tubercle or syphilis.—Dr. A. WHITFIELD asked if an examination had been made for tubercle bacilli. The case somewhat resembled miliary tuberculosis.—Dr. ROLLESTON said that the microscopic examination suggested an acute toxic change, but he had not stained sections specially for tubercle bacilli.—Dr. P. KIDD remarked that it was certainly an obscure case though it was somewhat suggestive of tuberculous ulceration.—Mr. TURNER, in reply, said that a specimen of the growth had been examined both for tubercle and for actinomycosis without results. The patient's son had died from consumption. The submaxillary gland of the patient had recently become enlarged and there was a suspicious edge of new tissue which had appeared on the upper lip.

Dr. H. D. ROLLESTON exhibited a case of Multiple Cutaneous Carcinomatosis secondary to Carcinoma Mammæ. The patient, a single woman, aged 34 years, had had the left breast removed for early carcinoma on Sept. 29th, 1897. The axilla was cleared out at the same time. Fifteen months ago nodules were noticed near the right clavicle and since then the numerous discrete subcutaneous tumours had appeared. In June last there were 105 discrete tumours on and under the skin, chiefly of the trunk, but also of the neck and head, while the right breast was full of nodules. Since then a few of the tumours had got smaller, notably that on the vertex, while the majority had increased in size. The condition was not that of carcinoma "en cuirasse" but a generalised carcinomatosis. A section of an excised nodule shown under the microscope revealed spheroidal-celled carcinoma.—The PRESIDENT was surprised at the length of time which this case had lasted. He remembered a case of carcinoma of the mammæ which resembled this one, but the disease ran a rapid progress and the patient died six weeks from the outbreak of the secondary deposit of carcinoma in the skin. This was an unusually rapid development. The case before the society, on the other hand, was unusually slow and some of the growths had actually receded.

Dr. NORMAN DALTON exhibited a case of Cystic Kidneys, apparently Congenital. The patient was a woman, aged 35 years. She had had no illnesses of importance. The tumours in the abdomen were discovered by her medical attendant accidentally when she came under treatment for dyspepsia eight months before. There was a lobulated elastic swelling on each side of the abdomen, occupying the position of the kidneys, but extending lower down. That on the left side was the larger, and at times the colon could be distinctly made out in front of its lower portion. The urine varied in quantity but was sometimes abundant. The specific gravity was low (1012), the colour was usually pale, and sometimes there was a trace of albumin. As a rule she passed about half the normal quantity of urea per diem. There had never been any dropsy and there had been no uræmic symptoms. The heart was apparently large and the case showed the cardio-vascular changes of Bright's disease. As there were no symptoms of stone or any cause of hydronephrosis the cystic condition of the kidneys was probably congenital. There was a lordosis of the dorsal vertebræ which had the effect of pushing the heart forwards and bringing more of its surface in contact with the chest wall.—Dr. PERCY KIDD asked how it was that in some cases of cystic kidney they got marked cardio-vascular changes while in others these were not present.—The PRESIDENT remarked on the diminution of urea in this case. There was no note on the deficiency of urea in the case brought before the Clinical Society by Dr. Sidney Phillips last year, and he thought that this accounted for the absence of cardio-vascular changes.—Mr. CHARTERS SYMONDS commented on the fact of the enlargement of the kidneys being unequal on the two sides. He remembered the case of a cook, aged 43 years, upon whom he was called to operate. The left kidney was very large and it was thought to be due to compensatory hypertrophy, secondary to a tumour of the right kidney, but on opening the abdomen they found cysts in both. Fortunately this operation had not been done through the loin or the result would have been disastrous.—Dr. SANSOM referred to the association of cardio-vascular changes with renal disease in this case. It seemed as if a very little fibrosis of the kidney was able to initiate a very large amount of cardio-vascular change. The condition of the urine in this case was strongly suggestive of contracted granular changes in the kidney.—Dr. DALTON, in reply, said that the probable reason why the kidney acted functionally in some cases and did not in others depended on the amount of renal tissue left.

Dr. H. BATTY SHAW exhibited a case of Transfacial Bullet Wound occurring in a man, aged 31 years, a bombardier in the Royal Horse Artillery, lately engaged in South Africa. He was struck by a Mauser bullet in front of the right ear, the bullet being eventually found by the patient under the upper lid of the left eye. The patient was said to have been shot at very close range and was unconscious for eight or nine days after the injury. After recovery of consciousness the bullet was removed, when various muscles were found to be paralysed, but he said that he had greatly improved lately. Considerable damage to the cranial nerves had resulted—viz., I., some impairment of smell in the left half of the nose; V., some anæsthesia of the left side of the face over an area lying between the left orbit and the mouth; VII., some doubtful weakness of the left face; XI., regurgitation of liquids occurred and the voice had a nasal character, but there was no sign of involvement of the trunk of the spinal accessory nerve; and XII., the right half of the tongue was wasted and puckered, the tongue protruded to the right but could be put to the left angle of the mouth as well as to the right. There was also loss of taste for salt in the right half of the tongue, and considerable paresis of the right vocal cord. The right palpebral fissure was narrowed and the pupil was somewhat smaller than on the opposite side, which was probably due to injury of the sympathetic nerve on the right side. Ever since the injury pressure in the right external auditory meatus caused a great desire to cough. Dr. Shaw remarked on the strange fact that the right recurrent laryngeal nerve was affected but no other part of the vagus nerve.—Mr. CHARTERS SYMONDS suggested that this was explained by the bullet not having taken a straight course.—Mr. G. L. CHEATLE questioned whether the patient had been, as stated, shot at a very close range. A spent bullet had a low velocity and was easily deflected. In some cases which he had seen in South Africa the bullet when shot from an old rifle had towards the end of its course turned completely over.—Mr. TILLEY suggested that traumatic inflammation might account for the vagus injuries. The question whether the fibres of the recurrent laryngeal nerve really came from the spinal accessory or vagus was in doubt, but the evidence was gradually tending to show that the fibres were really from the vagus, and this case helped to support that view.—Dr. SHAW, in reply to the PRESIDENT as

to what evidence there was to show that the patient had been shot at short range, said that the patient stated he saw the man firing at him, and, moreover, stated that it was the only occasion in the whole war in which the Boers had charged the guns.

Dr. W. A. MARRIS (for Dr. C. E. BEEVOR) exhibited a case of Hæmorrhage into the Spinal Cord occurring in a man, aged 57½years. The patient was suddenly seized, on April 24th, 1899, with tingling in the arms, weakness of the hands, pain between the shoulders, weakness of the legs, and distension of the epigastrium. The condition was complete in half an hour and had not progressed since. He now had wasting of the small hand muscles on both sides, and on the right side weakness of the flexors of the fingers. There was stiffness of the left leg. The left pupil was smaller than the right. He had lost sensibility to pain and temperature in the right leg and in the right side of the trunk and part of the left side of the trunk, but there was no anæsthesia to touch.

Mr. CHARTERS SYMONDS exhibited a case of Central Sarcoma of the Lower Jaw three and a half years after Enucleation, occurring in a girl, aged 16 years, who was operated upon on April 27th, 1897. She had had a central myeloid sarcoma in the left half of the lower jaw. There was an opening in the gum through which the growth could be seen. The tumour was of large size and bulged externally and internally. It was removed by an incision extending from the red margin of the lip under the jaw. The bony wall was divided and raised upwards under a flap. The lining membrane was completely enucleated from a cavity, the mucous membrane of the gum was widely removed round the opening, the flap of bone was pressed back into position, and the wound was closed. The special points illustrated were: (1) freedom from recurrence after three and a half years; (2) the serviceable condition of the lower jaw; and (3) the successful adaptation of the denture. There was no loss of symmetry and hardly any scar.

LIVERPOOL MEDICAL INSTITUTION.

Inaugural Address.

AT the first meeting of the session of this society, held on Oct. 11th, Mr. EDGAR BROWNE, the President, delivered his Inaugural Address to a large audience of members and visitors whose attention he closely held during the delivery of an extempore philosophical discourse, enlivened by a rich vein of humour and anecdote, which, it is hoped, will be published *in extenso*. The President took as a basis of his address the position that the advances in medicine and science were due to the men who propounded theories rather than to those who collected facts. He considered the practice of medicine so divided that some difficulty was felt in realising that all its branches sprang from the same tree. The formation of groups of specialists concerned with small areas in the body favoured the idea of disunion, and their existence was justified by the necessity of accumulating multitudes of details with very long names, these names carrying no information to those outside the border of the speciality. As everyone prided himself on a knowledge of facts a general agreement had been arrived at that they advance by an accumulation of minute details, but, argued the President, the contrary was the truth. Facts were only materials—their value depended upon the use made of them; too great a number, like Solomon's wives, might prove unmanageable and defeat the object of accumulation. They might not see relations, order, or sequence in vast numbers of facts, but in fewer they might be able to classify and simplify. There were generally more facts known than were wanted at any time, and the man of genius came and selected a few that were probably familiar to all; he saw their relationship and weaved them into the web of a theory. Moreover, the adoption of a theory or the acceptance of the relationship of facts or phenomena, whether true or false, leads to more accurate observation and a better knowledge of facts than they possessed before. What the practical man regarded as facts were often only his opinions, and scarcely a dose of medicine was given or a surgical procedure carried out but in obedience to an unconscious theory, and the practical man's real objection to theory was that it did not allow (as he was obliged to allow) for disturbing elements, but therein lies the difference between the art and the science it was founded upon. But if the art died the science was immortal. Mr. Browne here illustrated by numerous examples that facts had been accumulated by accident, by observation, and by research. The first was the most frequent among primitive people, but was very uncertain and slow; the second was the strong point of the medical profession; and the third was undertaken in obedience to a preconceived idea. To prove or disprove an opinion was a most fertile source of information. Contrast their knowledge of inflammation from observation and from what they had learned from research for special organisms and the like. The human intellect had been made what it was by the exercise of the intellect, as finance, not miserliness, made wealth. They could trace the progress of ideas in several stages (all exercises of the mind); the lucky guess, the speculation, the hypothesis, the theory, the law,—all had given help. Phrenology, although absurd in detail, contained the germ of localisation of brain functions and helped to familiarise the idea of the brain as a compound organ. The "Vestiges of the Natural History of Creation," a speculation on a modification of animal form by outward circumstances, passed into the great hypothesis which had modified European thought in many things outside biology. Theory was hypothesis more fully justified by evidence; they reserved the term law for generalisations supported by all known facts (like gravitation), which they believed could not be altered by any investigation. When the mathematician got hold of it they were sure, but laws existed which were not demonstrated by mathematics. The President went on to say that the men who had most largely influenced their work in this century were Young, Darwin, Pasteur, and Lister—all men of clear vision and vivid imagination. Young's facts were few—the ripple on the pond and the light of day; his theories were worked out by a strain of reasoning difficult to follow (even when they were shown the way), indicated a most wonderful power of mind in originating, and helped science in a most remarkable manner. His labours were felt all through physics; he propounded the theory of vision which served as a fulcrum to-day; he thoroughly understood the optical functions of the eye and described astigmatism; he made Helmholtz and Donders possible. These were brilliant theorists. Helmholtz's first treatise on the ophthalmoscope, a thin pamphlet, contained admirably accurate reasoning full of formulæ, but the instrument was imperfect, and if it had remained as it was would have been of little use, but everybody with a turn for mechanics made a better one as soon as this demonstration had been made. How many thousands of invaluable observations had resulted from that thin pamphlet. Donders's work, which was mainly theoretical, led to accurate observation of simple facts (that had passed without notice before) and to improvements in ocular therapeutics. Mr. Browne here illustrated the value of Donders's work by numerous illustrations drawn from ophthalmic surgery and general medicine, especially dwelling upon the advance in the knowledge of squint and assistance afforded to the study of neuralgia. The work of Pasteur and Lister led to revolution, and not only to progress in the domain of surgery, as was expected, but into every branch of medicine research was showing that processes in different parts of the body which seemed different were really the same. Disease was always the same, but modified by activity of cause, receptivity of tissue, or mechanical conformation of the organ. The same bacillus, the same irritant, would give rise to very different consequences in the lung, the intestines, or the cornea, but it did not lose its identity, and the lessons were to look for harmony and unity and not to regard anything as separate or fortuitous. No organ had a separate existence, but was only a part of the same body, and however different diseases looked they must be treated by the same theories as explained them in other organs. They required to know, not so much how many symptoms each organ might have, but how its intimate and essential physiology and pathology agreed with that of others. The theory that was true of one was true of all, and by its aid alone could they reduce their multitude of facts to order and attain that practical working simplicity that most strongly marked off science from empiricism. The President, in conclusion, enunciated that "theory teaches us there must be a harmony throughout the body, and that is only a part of that which reigns throughout the universe." The gratitude of humanity was due to those great men who had furnished them with the theories which had enabled them to carry on their daily work on a rational basis.

Dr. R. CATON proposed a vote of thanks to the President for

his address, which was seconded by Dr. MACFIE CAMPBELL and carried with acclamation.

Strangulated Femoral Hernia.—Trephining for Meningeal Hæmorrhage.—Pneumonic Consolidation.—Pulsus Paradoxus.—Myelopathic Albumosuria.

The second meeting of the session of this society was held on Oct. 25th, Mr. EDGAR BROWNE, the President, being in the chair.

Mr. G. P. NEWBOLT read notes of two cases of Strangulated Femoral Hernia in which he had resected the bowel, using Murphy's button to approximate the ends. One occurred in a woman, aged 70 years, and the other in a man, aged 41 years. Both recovered, the button passing in the first case in 18 days and in the second case in 24 days.—Mr. F. T. PAUL said, notwithstanding the success which had attended the use of Murphy's button in Mr. Newbolt's cases, that these sort of appliances were daily losing favour. They had served an excellent purpose in teaching surgeons the importance of accurate and water-tight approximations and they shortened the time occupied by the operation, but they managed to unite bowel and stomach wounds now both accurately and quickly with simple suture and by so doing avoided the risk of the presence of a foreign body lying in contact with the wound, a risk which had caused many fatalities. Recently he had only used the button when the difficulties attending sutures were unusually marked.—Mr. R. W. MURRAY remarked upon the difficulty there was in knowing how best to deal with the injured gut, whether to return it or to excise it, and suggested that in all cases of doubt it would be better to excise it. He related a case of strangulated hernia (inguinal) in which he had successfully removed a gangrenous portion of small intestine, uniting the cut edges by simple suture—a method he much preferred to the use of Murphy's button.

Mr. GEORGE HAMILTON related a case of successful Trephining for Meningeal Hæmorrhage. A boy, aged eight years, while running along with his hoop fell on the pavement; though feeling a little sick and vomiting once he played about until bedtime. Next morning he appeared to be well, but became drowsy and unconscious the following day. The main features in the case were: (1) the considerable period elapsing between the accident and the symptoms; and (2) the marked dilatation and fixation of the left pupil. These led to the almost certain diagnosis of hæmorrhage. The boy made an excellent recovery and never had a rise of temperature.—Mr. W. THELWALL THOMAS drew attention to the importance of dilatation of the pupil in extra-dural hæmorrhage as an indication of cerebral pressure in the middle fossa of the same side; if, on trephining and removal of the extra-dural clot, oozing of blood still proceeded from deeper down and light gauze packing failed to arrest it the external carotid artery should be tied.

Dr. C. J. MACALISTER directed attention to cases of Pneumonic Consolidation which, after running a very chronic course, resolved immediately, after exploratory puncture with an aspirator needle. This sequence of events had occurred so frequently in his experience that he had come to regard it as something more than coincidence. He related cases in which it had happened and in which recovery had quickly followed the puncture, and he also referred to a case of consolidated lung associated with fever of several weeks' duration in which improvement leading to hope of recovery ensued, but which afterwards proved to be the result of some malignant trouble connected with the liver from which the patient ultimately died.—Dr. W. BLAIR BELL said that he had a case recently where unresolved lung existed 14 days after croupous pneumonia. Puncture with a trocar brought about rapid resolution. He thought the reason for the cure was explicable if the comparison was made between lung in a state of inflammation and inflammation in any other part of the body where the knife or needle gave rapid relief, probably by causing a flow of blood from the inflamed part, thereby relieving the congestion and condition of stasis which occurred in the course of inflammation and so bringing about resolution. It was advisable to use a large puncturing instrument, such as a trocar, to insure bleeding, and to adopt this method of treatment as soon as ordinary natural resolution seemed improbable.—Dr. T. R. BRADSHAW said that he wished to draw attention to the manner of operation. It was never desirable to use an exploring syringe with a small needle, because if fluid were found the aspirator would have to be employed and so the patient would be put to the pain of two punctures instead of one, or, on the other hand, the fluid might be too thick to run through the small needle, hence a fairly large needle connected with an aspirator should be used.

Dr. JAMES BARR read a note on the so-called Pulsus Paradoxus and also on a case of Myelopathic Albumosuria.—Dr. BRADSHAW said that Dr. Barr's was the twelfth undoubted case of myelopathic albumosuria which had been thoroughly investigated, and that now that the condition was more generally understood cases were becoming more frequent. The records showed that it was a disease of the second half of life and all but one of the recorded cases were in males. The first symptoms were generally associated with bone lesions, but there was reason to believe that the presence of albumose could be detected at an early period if it were sought for. It was highly important to distinguish this form of albumosuria from that which was often found in pneumonia and other inflammatory conditions and which the late Sir William Roberts called peptonuria. The form under consideration was always associated with a cellular infiltration of bone known as multiple myeloma, but the manner in which they were related was at present merely a matter of conjecture. The term "myelopathic albumosuria" was a convenient one to express the association.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

Inaugural Address by the President.—Aneurysm of the Coronary Arteries of the Heart.—A Method of Intestinal Suture for Gastro-enterostomy and Enterectomy.—Exhibition of Cases and Specimens.

THE opening meeting of the session of this society was held on Oct. 19th, Dr. GORDON BLACK, the President, being in the chair.

The PRESIDENT gave his inaugural address on Some of the Duties of Members of the Medical Profession to Each Other.

Dr. WARDROP GRIFFITH read a paper on Aneurysm of the Coronary Arteries of the Heart and showed specimens illustrating it.

Mr. H. LITTLEWOOD advocated a method of Intestinal Suture for Gastro-enterostomy and Enterectomy by excising a portion of the mucous membrane and then uniting the cut edges of the stomach and the intestine by means of a continuous cat-gut suture, interrupting the suture by knotting it at two equi-distant points. The parts were clamped and held in apposition by Doyen's clamp forceps—these guarded by rubber tubing made admirable intestinal clamps—an incision was made down to the mucosa, an elliptical portion of the mucous membrane was excised, and the coats were separated for a short distance from the mucosa. This method prevented the troublesome closing sometimes occurring after gastro-enterostomy, and both in this operation and in that of enterectomy it allowed a broad surface consisting of all the other coats to be easily united by the continuous suture. It was not found necessary to bring the two serum surfaces in contact along the whole line of suture. Mr. Littlewood preferred a small curved Hagedorn's needle used on the flat to any special needle and chromic gut for suturing. (Mr. Littlewood showed a woman, aged 51 years, on whom he had operated three months ago, removing the cæcum for malignant disease and uniting the ileum to the ascending colon by the method described. He also referred to five cases of gastro-enterostomy successfully performed by this method.)

The following cases and specimens were exhibited:—

Dr. WARDROP GRIFFITH: A man with great Œdema of the Eyelids together with some Œdema of the Forehead. There was no visceral disease and no history of erysipelas. The œdema was remarkably firm.

Mr. CONSTABLE HAYES: A case of Multiple Odontomata probably in connexion with the Bicuspids, which were all missing.

Dr. E. F. TREVELYAN: A case of Functional Tremor simulating Paralysis Agitans in a man, aged 28 years. The tremor was of three years' standing. It sometimes ceased completely when the patient supposed that he was not being observed and there were no other symptoms of paralysis agitans.

Mr. MAYO ROBSON: (1) Cæcum removed for Tuberculous Disease producing Stricture at the Ileo-cæcal Valve; (2)

Cæcum removed for Cancer of the Ileo-cæcal Valve; (3) Extra-uterine Gestation Diagnosed and Removed at the Eighth Week, before Rupture; (4) Microscopical Section showing Interstitial Pancreatitis; and (5) a Specimen of a Recurrent Papilloma of the Bladder illustrating its Infectivity.

Mr. A. E. LITTLE: (1) A Slide showing the Plague Bacillus; and (2) Photographs of Plague Hospitals.

Dr. C. M. CHADWICK: (1) Splenic Leucocythæmia (specimen of blood shown); and (2) a Stomach, much Elongated, with Hour-glass Contraction (death from tetany).

Dr. ALLCOCK (Goole): Cystic Dilatation of a Corpus Luteum.

Mr. BASIL HALL (Bradford): A Perfect (?) Method of Sterilising Catgut.

Dr. A. L. WHITEHEAD: (1) Cavernous Angioma of the Orbit; (2) Epithelioma Auris; and (3) a Superior Cervical Ganglion of the Sympathetic removed for Glaucoma.

Mr. H. LITTLEWOOD: (1) Cæcum removed for Malignant Disease, with End-to-end Intestinal Suture (patient and specimen); (2) A case of fracture of the Patella wired on August 28th, 1900; (3) Extensive Skin-grafting by Thiersch's Method; (4) Malignant Pustule removed from the Forearm; (5) Epithelioma of the Tongue from a man, aged 30 years; and (6) Epithelioma of the Tongue from a woman, aged 45 years.

Dr. A. G. BARBS: (1) A case of Obstruction of the Superior Vena Cava; and (2) a case of Tuberculous Peritonitis with Secondary Glandular Enlargement in the Neck.

Mr. B. G. A. MOYNIHAN: (1) Cancer of the Body of the Uterus removed by Vaginal Hysterectomy; (2) Fibroid Uterus removed by Vaginal Hysterectomy; (3) Vulva and Portion of the Vagina removed for Carcinoma; and (4) Primary Carcinoma of the Vagina.

Mr. LAWFORD KNAGGS: Epithelioma of the Bladder springing from the Vicinity of the Prostate.

CHELSEA CLINICAL SOCIETY.—The opening meeting of the session of this society was held on Oct. 16th, when Dr. William Ewart, the President, delivered an address on "A Clinical View of some of the Mechanisms of the Heart and its Valves," of which the following is an abstract. He commenced by observing that the society was to be congratulated upon the useful work already accomplished. A large share of the success which had been achieved was to be ascribed to the energy of the retiring president, Mr. Foster Palmer, and to the exertions of the senior honorary secretary, Dr. Austin Cooper. The special purpose of the address was to illustrate the methods applicable to the problems of cardiac disease. For the elucidation of the intricate questions connected with valvular defects and with their physical signs that which was most needed was a firm groundwork of anatomy and physiology. Where physiology had not yet supplied all the information required the clinical method might be turned to account for the study of the heart both in health and in disease. In spite of its limitations, of its unavoidable dependence upon theory to bridge over the gaps between definitely proved facts, and of the provisional character of its conclusions, that method possessed a solid strength in the never-failing supply of the unerring experiments of disease. In the course of a brief anatomical introduction a description of the more rigid apparatus of the bullock's heart with its two bony plates helped to throw light upon the existence and the functions of the two fibrous roots or fibro-cartilages of the aorta in the human subject, of which specimens were exhibited. The larger root had been described by Sibson as the central fibro-cartilage; but they both fulfilled essential functions not only as forming part of that internal axis for the intrinsic movements of the heart which it was possible to identify with the ventricular septum and the foot of the aorta, and as affording attachment to the auriculo-ventricular valves and to the so-called "fibrous ring," but also as the means of bringing about those slight changes in the position and in the direction of the aorta which on careful inspection could be recognised in the fully contracted heart. In connexion with the ventricular systole, the mechanism of which was compared to the action of hand-bellows, stress was laid upon the changes occurring in the "supra-papillary space" and the "aortic channel," whilst the "infra aortic space" remained patent. Attention was called to the contrast between the recent views of Potain and those of Chauveau as to the function of the auricle during the preliminary stage of ventricular systole, the so-called "pre-systole." As regards the mitral mechanism it was suggested that since all hearts differed in their individual structure, differences might exist in the mode of closure, ranging between the two extreme types described as the "high closure" and "low closure," the latter being the normal type. The varied functions of the papillary muscles and of the chordæ and the myotatic theory of auriculo-ventricular peristalsis were discussed, and the production of the first sound was referred largely to papillary agency. Clinical illustrations were drawn chiefly from the varieties of mitral disease which at an early stage present little differentiation as regards lesions. An explanation was offered for the evolution of apparently identical changes into pure valvular incompetence in one set of cases and into pure stenosis in the other. The development of stenosis was more likely in young and healthy hearts with a thoroughly normal low closure, whilst incompetence resulted from opposite conditions. The late stages of mitral stenosis were distinct in every way from the earlier stages. The mechanisms and the physical signs were largely influenced by the protrusion of the auricle into the ventricle. It was suggested that this complication might be connected with the production of the murmurs of stenosis, with the suppression of some of them at a later stage, and with the disappearance of the aortic second sound at the apex. The peculiar character of the pulse of compensated mitral stenosis seemed also capable of explanation upon the same lines. Most of the points which were brought forward were illustrated by specimens and diagrams.—A vote of thanks to the President, proposed by Dr. J. B. Ball and seconded by Dr. C. J. Harrison, was carried. It was resolved that the address should be published at the expense of the society.

WINDSOR AND DISTRICT MEDICAL SOCIETY.—The first meeting of the session of this society was held on Oct. 24th, Mr. W. B. Holderness, J.P., the President, being in the chair.—The President showed the following radiographs: (1) The Shoulder-joint some Months after the Reduction of a Dislocation, showing the humerus split and broken; (2) a Broken Patella; and (3) a case of Achondroplasia.—Dr. E. B. Hulbert showed (1) several drawings and photographs of Epidemic Eczema, one or two of which exhibited the dusky pigmentation of the skin following an attack; and (2) (by kind permission of Mr. J. R. Lunn, of St. Marylebone Infirmary) various drawings and photographs of Rare Skin and other Diseases, including Melanotic Sarcoma, Raynaud's Disease, Nævus of the Face, Rodent Ulcer, and a Rare Eruption in a Case of Renal Disease.—Mr. Clinton T. Dent (surgeon to St. George's Hospital) delivered an address entitled "Surgical Lessons of the War." After pointing out that the great interest evinced some months back in the surgical results of the war was already waning and that there was a risk of much of the valuable experience which had been gained being lost to posterity he said that experiments with small-bore bullets which had been carried out before the war did not conform closely with the results arrived at by practical experience. He considered that, well as the members of the Royal Army Medical Corps had worked, the system was capable of improvement, more particularly in the direction of the formation of an army medical reserve composed of men of active medical and surgical experience and standing. He suggested the institution of a medical league to encourage a general interest in army medical matters. The mild character of the wounds had been greatly exaggerated in the press, but there still remained a great improvement upon the results of former wars. The conditions favouring these satisfactory results were (1) the small-bore bullet, (2) the use of antiseptics, (3) the climate, and (4) the condition of the men and their surroundings. After comparing the Lee-Metford bullet and the Mauser bullet and their velocities Mr. Dent described the eccentric rotation of bullets which led to their retention in soft tissues even when no bone had been struck. Clean perforations of bones which abounded in cancellous tissue were common, but when the shaft of a long bone was struck the bone was broken up and expanded as well as fissured. Union usually took place in consequence with much callus. Mr. Dent pointed out that wounds of great joints (the ankle excepted) did well, as also did head injuries in which trephining was frequently practised, and in

every case it demonstrated the necessity of relieving the pressure on the brain from the splintered inner table, thus embodying the teaching of Ambroise Paré 350 years ago. He concluded a lucid and suggestive paper by insisting on the great difficulty of the surgical problems and on the need for long and minute study of them in order that a class of specialists in military surgery could be created.—Mr. S. Osborn (of the St. John Ambulance Brigade), who had been serving with the Van Alen Field Hospital attached to Lord Methuen's column, spoke in corroboration of the remark made by Mr. Dent that the surgical lessons of the war were of the greatest value as showing how much less serious were the injuries in the South African war than were those sustained in previous wars. This satisfactory condition he attributed largely to the pointed character of the Mauser bullet taken in connexion with the excellent antiseptic precautions adopted almost immediately on receipt of the injury. Having been present in the Turco-Greek war he was able to compare the injuries with those in the Boer war and he showed by comparing the Martini bullets with their blunt extremities which he had removed in the former war with the conical ends of the Mauser bullets of the present war what a much more formidable projectile the Martini bullet was as compared with the Mauser bullet. In conclusion Mr. Osborn hoped that someone would read a paper on the medical lessons of the war, as that was the side which demanded more special attention. It was also a question whether by the attachment of a skilled sanitarian to every army corps and the formation of a sanitary corps similar to those which were employed in continental armies the sanitary condition of the army in the field might not be improved and the terrible mortality on the medical side in future wars be considerably lessened.

NORTH OF ENGLAND OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.—A meeting of this society was held in the Medical Institution, Liverpool, on Oct. 19th, Dr. J. B. Hellier (Leeds), the President, being in the chair.—Dr. H. Briggs (Liverpool) related a case of Tubal Pregnancy with formation of a tubal mole which had been retained in the unruptured Fallopian tube for four months, no hæmatocele being present. A tubal swelling was detected lying in the floor of the pelvis; this was removed by posterior vaginal section. The distended Fallopian tube was unruptured. The absence of hæmatocele was a feature of interest and Dr. Briggs believed that the tension in the tube had been limited by leakage of blood from the uterine end of the tube into the cavity of the uterus. On section the tube contained a mole with some fluid blood.—Dr. A. Donald (Manchester) related a case of Tubal Pregnancy in which a five months fœtus with placenta was removed by abdominal section. The patient, a woman, aged 40 years, had one child 16 years before. She complained of recurrent attacks of abdominal pain with amenorrhœa for nine months. The pain was only of six weeks' duration. The abdomen presented a diffuse fluctuating swelling, reaching from the pelvis to the level of the umbilicus. The uterus was considerably enlarged and could be felt lying in front and to the right of the swelling. Abdominal section was performed. A sac containing a living fœtus at five months' development was discovered; the fœtus was removed, amniotic fluid escaping. The placenta occupied the floor of the pelvis and was removed without difficulty from the broad ligament. Hæmorrhage was readily controlled by silk ligatures at the uterine and pelvic borders of the broad ligament. Dr. Donald considered that the placenta probably occupied the Fallopian tube, inasmuch as there had been no history of rupture. A few hours after the operation a very large decidual cast was expelled from the uterus. The patient made a rapid recovery.—Dr. Arnold Lea (Manchester) showed a Fallopian tube from a case of Extra-uterine Gestation with Hæmatocele. The ruptured tube was removed per vaginam after evacuation of a quart of clotted blood from the peritoneal cavity.—Remarks were made by Dr. Lloyd Roberts (Manchester), Dr. E. Stanmore Bishop (Manchester), Mr. R. Favell (Sheffield), and others.—Dr. J. E. Gemmell (Liverpool) showed a Fibro-cystic Pedunculated Tumour of the Uterus removed by abdominal section from a patient, aged 32 years. The tumour had grown outwards between the layers of the broad ligament, but was removed without difficulty, the uterus remaining intact. The patient made an uninterrupted recovery.—The President showed:—1. A Uterus, Pregnant five and a half months, with Multiple Myomata. The patient, a woman, 33 years of age, had a tumour which filled up Douglas's pouch and which would have obstructed labour. Abdominal section was performed and the uterus with the tumours were removed by supra-vaginal abdominal hysterectomy. The patient rapidly recovered. 2. Bilateral Suppurating Ovarian Cysts removed by abdominal section from a patient who had suffered from septic puerperal infection after delivery 14 months previously.—Dr. E. T. Davies (Liverpool) read notes of three cases of complicated Ovarian Tumours. Case 1. The patient was a women, aged 58 years, with a history of recurring attacks of pelvic pain for several months. At the operation the pedicle had undergone torsion and numerous adhesions to the bowel and omentum were present. Case 2. The patient, a woman, aged 43 years, on whom ovariotomy had been performed 13 years previously, was suddenly seized with acute abdominal pain and peritonitic symptoms. A cystic tumour was felt in the pelvis. Abdominal section revealed an ovarian cyst with acute torsion of the pedicle and hæmorrhage. Both patients made good recoveries. Case 3. The patient, a woman, aged 53 years, had a solid tumour of the ovary, accompanied by ascites and the symptoms of acute peritonitis. At the operation no twisting of the pedicle had occurred, but the peritoneum showed evidence of acute inflammation. This patient, though extremely ill, with a temperature of 104° F. and a pulse of 140 at the time of operation, made a good recovery.

BEDFORD MEDICAL SOCIETY.—A meeting of this society was held on Oct. 25th, Mr. Jabez Carter being in the chair.—Dr. Henry Skelding showed a boy with Webbed Fingers, on one of which he had operated by Morton's method, and a boy with Keloid Scars which had followed an operation for lop ears performed in South Africa.—Dr. G. P. Goldsmith showed a skiagram of a case of Transverse Fracture of the Patella in which bony union appeared to have been obtained by fixation on a back splint for three months.—Dr. R. H. Coombs showed the Kidneys from a case of Anuria of 10 days' duration. The right kidney was hydronephrotic and useless, the left was hypertrophied and hydronephrotic, its upper third consisting of a bilocular sac which had no communication with the pelvis of the kidney. The left ureter was blocked by a calculus near its upper end. Both ureters were dilated and the bladder was hypertrophied. The symptoms were anuria and vomiting. An hour before death Mr. W. G. Nash cut down on the left kidney and evacuated four or five ounces of purulent urine from the cyst in the upper third of the kidney which presented in the loin.—Dr. Coombs also showed a woman with Molluscum Fibrosum and a man with Progressive Muscular Atrophy.—Dr. F. B. Willmer Phillips read notes of a child who had repeated attacks of Fever, which he attributed to gnat-bites.—Dr. H. Savory showed the Kidneys from a child, aged 10 weeks. They were the seat of congenital cystic disease. A previous child in the same family had died from this disease in 1898 and the kidneys were shown.—Dr. A. C. Hartley showed a Hairball from a Cow's Stomach.—Mr. W. G. Nash showed:—1. A Uterine Mole passed at six months. Growth had ceased at 10 weeks when a slight hæmorrhage occurred. The symptoms were amenorrhœa and pelvic discomfort. There was retroflexion of the uterus. 2. A Suppurating Dermoid Cyst removed from a woman, aged 41 years, who had borne six children without any difficulty in delivery. The pedicle had become twisted two turns and was nearly obliterated. This had caused hæmorrhage, suppuration in the cyst, and peritonitis around it. The patient made a good recovery. 3. A Papillomatous Cyst of the Ovary and an Annular Carcinoma of the Small Intestine which had been removed from the same patient. The symptoms were those of intestinal obstruction. A large, rapidly growing ovarian tumour was removed and at the operation the growth in the bowel was discovered. The growth with four inches of the small intestine and several glands in the mesentery were removed a fortnight later. Allingham's bobbin was used to connect the divided ends of bowel. The patient made an excellent recovery.—Mr. Nash also read notes of a Gastro-jejunostomy performed for cancer of the pylorus. Murphy's button was used. The patient had been much benefited by the operation and had increased 20 lb. in weight in three months.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.—The opening meeting of the session was held on Oct. 11th, when the President, Dr. E. Wearne Clarke, delivered his introductory address on Medicine in Fiction. Commencing by a brief reference to medicine as seen in pictorial art,

ancient and modern, he proceeded to notice medicine and its practitioners as depicted in the drama, particularly in the plays of Molière and in Goethe's *Faust* as represented in Mephistopheles's advice to the student. Turning to the novelists the address next dealt with some of the medical men and medical incidents portrayed by Balzac, by Tolstoii in "Anna Karénina," and by Conan Doyle in "The Curse of Eve" and other works. The Doctor Lydgate of George Eliot's "Middlemarch" was next noticed at some length, and the address closed with reference to "The Diary of a Late Physician," by Samuel Warren; to "The Ralstons," by Marion Crawford (as an example of Transatlantic medicine); and finally, to "Ian Maclaren's" well-known Doctor Maclure in his book "Beside the Bonnie Briar Bush."

Reviews and Notices of Books.

Diseases of the Throat, Nose, and Ear: A Clinical Manual for Students and Practitioners. By P. McBRIDE, M.D., F.R.C.P. Edin., Fellow of the Royal Society of Edinburgh; Surgeon to the Ear and Throat Department of the Royal Infirmary; Lecturer on the Diseases of the Throat and Ear in the University and in the School of Medicine of the Royal Colleges, Edinburgh. Third Edition, revised and partly re-written. With Coloured Illustrations from Original Drawings. Edinburgh and London: Young J. Pentland. 1900.

THIS is a well-printed and handy manual of some 700 pages, furnished with a copious index. The first section dealing with affections of the larynx and pharynx occupies nine chapters. Eleven chapters are devoted to nasal affections and an equal number to diseases of the organ of hearing. The author wisely omits anatomical and physiological details, which can be studied in appropriate treatises, so that the bulk of the work is devoted to clinical material and details. The whole of the former work has been revised and in part re-written to keep pace with the ever-increasing literature of the subjects.

The chapters on Affections of the Pharynx and Larynx are marked by reliable diagnostic rules and abundant directions for treatment, the writer not failing to express the results of his own experience. Some of the coloured plates of laryngeal diseases are exceedingly good and exactly represent the appearances seen in syphilis, tubercle, and carcinoma. The chapter on Laryngeal Neuroses is also clear and useful, the subject being treated briefly, and only ascertained important facts are placed before the reader; much of the speculative theory so often written of in the numerous text-books on this subject is perhaps wisely omitted. All the affections of the nose commonly met with are thoroughly explained and their treatment is described. We think that hardly enough stress is laid on the difficulties of the after-treatment of nasal polypi in preventing return, and the association of these growths with sinus suppuration and necrosis is not prominently discussed. The illustration of a nasal polypus on p. 359 is also too highly coloured for clinical accuracy. The difficult subject of sinus suppuration might with advantage be amplified. We are all well aware that chronic discharges from the ethmoidal and sphenoidal regions are among the great difficulties of nasal surgery, and we should hail any advance in their treatment gladly. All these criticisms are, however, of a minor nature and do not detract from the value of the section on nasal diseases.

The section on Diseases of the Ear is eminently practical and marked by sound common sense and absence of recommendation of speculative methods of treatment. It is noteworthy to find that an authority in the position of Dr. McBride modestly explains his incapability of speaking with certainty on several debated points because of his want of experience. With regard to the radical operations on the mastoid in suppurations of the middle ear he remarks: "There are certain risks associated with the performance of all of them. ..... I do not think, however, that it is ever safe to be too sanguine as to the cure of the discharge, though this desirable result is often attained. In this respect the prognosis should be distinctly guarded." The author's views on the treatment of that common and inveterate cause of deafness—chronic aural catarrh—are eminently moderate and sensible and here, as throughout his work, no methods of treatment are advised that would not stand the test of clinical experience. This part of the book has some excellent coloured illustrations of diseased conditions of the membrane.

A critical digest is presented of intra-tympanic operations in chronic deafness with Eustachian obstruction, sclerosis, and adhesions. The writer points out forcibly their experimental nature. "The tendency of modern otologists—more particularly of the German school, who have in this respect been followed to some extent by American, French, and Italian authorities—is too much towards operations which are at best purely experimental. It would be no unfair criticism to state that, on perusing a chapter on this matter in any of the larger German works, the idea remains with the reader that otologists have vied one with another to cut out ever-increasing portions of the tympanic structures, that their reasons for so doing are not always sound, and that most credit is acquired by him who has succeeded in extracting most. It is true that the published cases are often said to be successful, and that we do not read of inflammatory reactions; but it is this very absence of inflammation in the recorded cases that makes one fear that, beyond those which have seen the light of day, there may be other instances of experimental operating which have been followed by less satisfactory results."

A prominent feature of this book is the abundance and nature of the local and general therapeutical remedies attached to each section. Another equally striking characteristic is the pronouncement of the author on the value of remedies, not from hearsay, but from his own experience.

As affections of the ear, nose, and throat are largely associated in practice, so this book must be exceedingly useful to practitioners, who will find in one volume an excellent practical account of these various maladies. The work is trustworthy throughout; errors of commission are practically not to be found, and those of omission are few. It cannot fail to enjoy the usefulness and deserved popularity of the preceding edition.

Treatment by Hypnotism and Suggestion, or Psycho-Therapeutics. By C. LLOYD TUCKEY, M.D. Aberd. Fourth edition, revised and enlarged. London: Baillière, Tindall, and Cox. 1900. Pp. 392. Price 7*s.* 6*d.*

THE Treatment of Disease by Hypnotism and Suggestion continues to hold an irresistible attraction to the lay mind. By the practitioner of medicine, however, hypnotism is still regarded with some suspicion, but the opposition to its employment is not so great as it formerly was and it is generally believed that certain functional conditions can be favourably influenced by it. Even the most ardent supporters of psycho-therapeutics, however, can scarcely claim that any great advance has been made, in this country at any rate, in the general adoption of hypnotism and suggestion as therapeutic measures, but if a physician select hypnotism as a method of treatment in certain functional disorders he can do so without fearing slight from his colleagues. As long as the treatment by these means is confined to functional affections no objection can be raised, but if it be claimed that all organic conditions can also be influenced then naturally serious opposition would be raised. In the work now before us Dr. C. Lloyd Tuckey treats the subject in an open and scientific measure. He is evidently sincere

in his belief in the efficacy of the measures which he recommends, and although we should take exception to some of his statements, yet as a whole there is much in the book that is interesting and instructive.

Much stress is naturally laid on the power of the mind over the body. We admit that certain symptoms may be brought about by expectant attention, that a rise of temperature may be the result of nervous excitement, that extreme anæmia may be caused by depressing emotions, but we are hardly prepared to admit that structural alterations can be so produced.

The methods of inducing the hypnotic state and the various phenomena produced are well described, and some points in the physiology and psychology of hypnotism are described in a thorough and interesting manner.

Considerable attention will naturally be directed to the accounts of cases which have been treated by hypnotism and suggestion by the author himself and by other observers. Most of these will be well understood as being especially applicable for this method of treatment, and they would be very likely to prove obstinate to the therapeutic measures in ordinary use, such as insomnia, neurasthenia, functional heart trouble, functional dysmenorrhœa, dipsomania, "mischievous morbid impulse," agorophobia, hysterical contracture of leg, hysterical aphonia, &c. With regard to some of the other cases, however, we admit we are sceptical. For instance, a case is recorded of a man who suffered from "syphilitic retinitis and optic neuritis." He was treated by mercurials, iodides, strychnine, electricity, but without avail, and his sight rapidly deteriorated. "In the left fundus there was a central scotoma and the right eye had lost the inner half of its field of vision. The right eye, which afterwards became the better of the two, appeared to be atrophic, its arteries were contracted to half their proper size, and the veins were also diminished in calibre." After 46 sittings we are told "there was very marked improvement . . . and it is evident that hypnotic suggestion was the curative agent." But we are not told the condition found in the fundi at the end of the treatment, and the weakness of the case is further emphasised by the passage—"In addition to being almost blind the patient, when he came under treatment, was affected with great mental depression and haunted by continual thoughts of suicide. He was also an excessive smoker." The removal of the mental symptoms and the desire for tobacco might be removed by hypnotic suggestion and the cessation of the excessive use of tobacco might account for the improvement in vision.

There are several cases that we might thus comment on. As we have already said, the majority of cases recorded are well chosen and demonstrate the uses to which hypnotic suggestion may be applied.

LIBRARY TABLE.

Original Contributions concerning the Glandular Structures appertaining to the Human Eye and its Appendages. With 71 Original Illustrations. By ADOLF ALT, M.D., Professor of Ophthalmology in Beaumont Hospital Medical College, St. Louis. Published by the *American Journal of Ophthalmology*, St. Louis, Mo. 1900. 8vo. Pp. 23. Price $1.50, or 6*s*.—Although this is a very thin volume the drawings which it contains represent a considerable amount of work. The photographs, which were made by Professor Alt from his own sections, exhibit the appearances presented by sections of the orbital and palpebral lacrymal glands, the structures contained in the upper and lower lids as the Meibomian and acinous glands, the eyelashes and their sebaceous glands, and the sweat glands as seen both in horizontal and in vertical sections and in sections made parallel to the surface. In some points of view photographs are superior to drawings made by hand; they give relative size and position with an exactitude which is unattainable by the draughtsman, however expert he may be; on the other hand, there is a mistiness and a defect of clearness in the details that are disappointing and show that still much remains to be done in micro-photography. In the text that accompanies the plates the author gives the results of his dissections and mentions some interesting facts. He finds that the lacrymal gland is, as a rule, larger in the negro than in the Caucasian, sometimes even twice as large. The number of excretory ducts, as usually given in text-books (from 6 to 12), is, he thinks, exaggerated. Like Waldeyer, he has never observed a true lymph-follicle in the human conjunctiva; isolated acinous glands are, however, present both in the palpebral and ocular conjunctiva. Besides these he finds acino-tubular glands and others which he regards as modified sweat glands. The two lacrymal canaliculi he believes generally unite to form a single tube before discharging their contents into the lacrymal sac. Lastly, he has found a small spiculum or plate of hyaline cartilage in the tissue just below the lacrymal caruncle.

Manual of the Diseases of the Eye for Students and General Practitioners. With 243 Original Illustrations, including 12 Coloured Figures. By CHARLES H. MAY, M.D. Columbia University, New York. London: Baillière, Tindall, and Cox. 1900. Pp. 422. Crown 8vo. Price 8*s*. 6*d*. net.—Manuals of the size of the present volume upon ophthalmology are numerous and afford little field for originality. In all, the mode of examination of the eye by inspection, by subjective or functional methods, by objective examination with the ophthalmoscope, constitutes the subjects of the initial chapters. The diseases of the several structures, as of the lacrymal apparatus, orbit, conjunctiva, sclera, iris, chorioid, lens, and vitreous, usually follow and are succeeded by an account of glaucoma, the affections of the retina, errors of refraction, and disturbance of motility, and there is commonly a chapter on ocular therapeutics. This plan has been adopted in the present volume. The author does not pretend to give any original views on these subjects, but the accounts of the several affections are briefly and clearly given and supply just the details that a busy practitioner or a student dressing in the eye ward requires. The directions for the performance of the operations for ptosis, entropion, ectropion, enucleation, and evisceration of the globe, and for cataract extraction, which Dr. May thinks is now usually done without iridectomy, are concise and good. Dr. May seems to have fulfilled the object which he had in view—of saying enough but not too much. The illustrations are rather rough but are quite intelligible.

A Handbook of the Diseases of the Eye and their Treatment. By HENRY R. SWANZY, A.M., M.B. Dub., F.R.C.S. Irel., Ophthalmic Surgeon to the Adelaide Hospital, Dublin. Seventh edition, with Illustrations. London: H. K. Lewis. 1900. Pp. 633. Price 12*s*. 6*d*.—When a manual for students has reached its seventh edition it may be considered to have passed successfully through its period of probation and to have proved its utility to those for whom it was intended. And, indeed, Dr. Swanzy's treatise is a very well-arranged manual. It owes its success to the clearness with which it is written, the care the author has taken to avoid unnecessary detail, the reliance that may be placed on the accuracy of the account given of each disease, and on the judicious treatment recommended, due to the fact, not only that Dr. Swanzy has had large opportunities of comparing different methods of therapeutic and operative procedure in the important hospitals with which he is connected, but that he possesses great powers of observation and a retentive memory. The subject of

refraction, so difficult to give briefly, occupies a reasonable space, only those facts being given which it is imperative that every ophthalmic student should know. In regard to light perception, which is too rarely tested, Dr. Swanzy regards the photometer of Dr. Wallace Henry of Leicester as the best, in which a standard light is gradually revealed by the removal of successive plates of opal glass. The author considers at some length both in the text and in an appendix the method employed by Professor Hering for determining the colour sense. Recent ophthalmological work has been carefully studied. Thus we find that Dr. Bleuler's recommendation of applying cocaine ointment made with lanoline in the proportion of 1 per cent. is mentioned as affording great relief to pain in cases of herpes zoster ophthalmicus. Dr. Mules's operation for ptosis is also given in full, as is an account of the remarkable affection of which numerous histories have been collected by Dr. StClair Thomson—optic neuritis associated with persistent dropping of watery fluid from the nostril, which fluid is believed to be of cerebro-spinal origin. In regard to cataract Dr. Swanzy seems to prefer the three-millimetre flap operation with iridectomy, first proposed by de Wecker, and he describes the proceedings to be adopted with great minuteness of detail. The application of the Roentgen rays for the discovery of foreign bodies, such as chips of metal in the eye, is fully described, and the text is illustrated by several drawings showing the mode of employment of the apparatus devised by Mr. Mackenzie Davidson for this purpose. When once the position of the chip is known with an approach to accuracy the introduction of a magnet will sometimes effect the capture and will enable it to be withdrawn without much injury to the vitreous. The book will be found very useful both by the student and the practitioner, and contains all that is requisite to guide them to the right diagnosis and treatment of the principal diseases of the eye.

The Frog: an Introduction to Anatomy, Histology, and Embryology. By the late A. MILNES MARSHALL, M.D., D.Sc., M.A., F.R.S., Professor in the Victoria University, Manchester. Edited by G. HERBERT FOWLER, B.A., Ph.D., late Assistant Professor of Zoology, University College, London. Seventh edition, revised and illustrated. London: David Nutt. 1900. Pp. 168. Price 4*s*.—The first edition of this work was published in 1882 and various minor alterations prompted by the inquiries of students or found advantageous in its use as a manual of dissection were made by the author in successive editions until his recent lamented death. The work has been placed in the hands of Dr. Fowler who states in the preface that he has not found it requisite to make any substantial alteration either in the substance or in the arrangement of the treatise. After a short introductory chapter on the use of the microscope and the mode of examining preparations the several chapters are devoted to the general anatomy of the frog: the digestive, vascular, osseous, muscular, and nervous systems, the eye and ear, the reproductive system, and the development of the animal. The most important addition consists in the introduction of a new set of woodcuts, drawn by Miss Mabel Green, in illustration of the process of development and metamorphosis. These are very well done and reflect credit on her accuracy and skill.

FEES FOR LUNACY CERTIFICATES.—At the meeting of the Devonport Board of Guardians held on Oct. 26th it was stated that letters had been sent to 25 medical practitioners asking whether they would accept half a guinea as the fee for the examination of pauper lunatics. 18 replies had been received. Six medical men agreed to accept the fee, 10 were against doing so, and two declined to express an opinion. After some discussion the guardians resolved to write to the bench of magistrates asking them to appoint one of the six medical practitioners to examine supposed cases of insanity in paupers.

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VARIOUS CANADIAN WINES.

(J. S. HAMILTON AND CO., BRANTFORD, ONTARIO, CANADA. AGENTS J. AND W. J. COURTNEY, 14, TOOLEY-STREET, LONDON, S.E.)

CANADIAN wines are not very well known in this country and the analysis of some specimens which we have recently received should therefore be of interest. The varieties of wines produced comprise dry and sweet white wines, sparkling and still, and red wines. As might be conjectured it is usually the practice where wine is produced to obtain spirits also and grape brandy is amongst the other products of viticulture in Canada. We have examined four distinct specimens of Canadian wine and the results were as follows:—Medoc (Chateau Pelee): extractives, 3·57 per cent.; mineral matter, 0·15 per cent.; alcohol, by weight 10·69 per cent., by volume 13·24 per cent., equal to proof spirit 23·21 per cent.; volatile acids reckoned as acetic acid, 0·276 per cent.; fixed acids reckoned as tartaric acid, 0·277 per cent.; and sugar, 0·51 per cent. This is a red wine simulating the wine of the Medoc district. We do not doubt that it is a perfectly pure wine, but, as will be seen from the analysis, it is somewhat acid in character and the somewhat sour taste confirms this result. Some amount of acetification had set in, otherwise the flavour was delicately fruity, suggesting muscatel grape. Dry Catawba: extractives 2·29 per cent.; mineral matter, 0·115 per cent.; alcohol, by weight 12·38 per cent., by volume 15·30 per cent., equal to proof spirit 26·82 per cent.; volatile acids reckoned as acetic acid, 0·198 per cent.; fixed acids reckoned as tartaric acid, 0·48 per cent.; and sugar, 0·35 per cent. This is a dry wine resembling Sauterne. It is clean on the palate and sound. As will be seen it contains a very small amount of sugar and is therefore correctly described as dry. St. Augustine: extractives, 12·19 per cent.; mineral matter, 0·11 per cent.; alcohol, by weight 13·92 per cent., by volume 17·17 per cent., equal to proof spirit 30·09 per cent.; volatile acids reckoned as acetic acid, 0·132 per cent.; fixed acids reckoned as tartaric acid, 0·247 per cent.; and sugar, 11·40 per cent. This is a red wine possessing the style of port. It is quite sweet as the figures of analysis will convey. It is a pure, sound wine with good fruity taste. It is intended chiefly for sacramental purposes. L'Empéreur: extractives, 4·675 per cent.; mineral matter, 0·105 per cent.; alcohol, by weight 11·54 per cent., by volume 14·27 per cent., equal to proof spirit 25·01 per cent.; volatile acids reckoned as acetic acid, 0·168 per cent.; fixed acids reckoned as tartaric acid, 0·48 per cent.; and sugar, 3·24 per cent. This is Canadian champagne and it is a very good wine. Though described as dry it contains a little over 3 per cent. of sugar, but it is not excessively sweet to the taste. There is no evidence to show in these results that the wines are not the normal and genuine products of fermented grape-juice. Doubtless, as further experience is gained in the methods of cultivation of the grape and of the rearing of the wine which it yields even better results will be attained. As it is, they are already encouraging.

SPIRITINE.

(SPIRITINE, LIMITED, 5, CARTERET-STREET, LONDON, S.W.)

Spiritine is described as a solidified spirit. We doubt whether, strictly speaking, that is the case. It is a waxy-looking substance, coloured blue, contained in tins provided with a screw-down lid. It burns on applying a light just as ordinary spirit burns. The device is most ingenious and most convenient. It is quite safe to use and may be carried about

without the inconvenience which attends upon the transport of spirit in its mobile form. A large quantity, it is stated, of this so-called solid spirit was sent to South Africa for use in the Imperial Yeomanry Hospital and it proved exceedingly useful. On submitting the substance to analysis we found it to consist of spirit and soap in which the proportion of spirit is very large and the proportion of soap remarkably small. The substance is entirely soluble in water. As is well known, soap is very soluble in spirit (or should we say spirit is very soluble in soap?) and this fact has been most ingeniously turned to account in "spiritine." It is hardly necessary to add how usefully this solid spirit fuel may be employed in a variety of ways in the home, the surgery, or the laboratory.

TRAUMATOL.

(OPPENHEIMER, SON, AND CO., LIMITED, 179, QUEEN VICTORIA-STREET, LONDON, E.C.)

Traumatol is obtained by the action of iodine on cresylic acid. It occurs in the form of a fine powder—yellowish in colour and soluble in alcohol and oils. The preparation before us is a concentrated solution of traumatol. As might be expected from its chemical composition traumatol is a powerful antiseptic, while it has the advantages of being comparatively non-toxic and non-irritating. Further, it is nearly odourless, what odour it has being faintly iodous. It has been used as a very satisfactory bactericide and antiseptic in surgery. Liquid traumatol can be conveniently diluted with water and employed as a lotion or for injection. It possesses obvious advantages over iodoform.

GRAPE NUTS.

(THE POSTUM CEREAL CO., LIMITED, BATTLECREEK, MICHIGAN. LONDON: TEMPLE CHAMBERS, TEMPLE-AVENUE, E.C.)

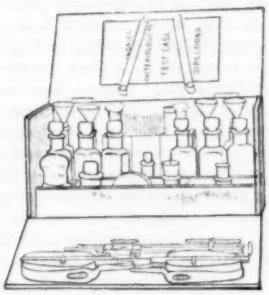
The basis of nomenclature of this preparation is evidently an American pleasantry since "grape nuts" is derived solely from cereals. The preparatory process undoubtedly converts the food constituents into a much more digestible condition than in the raw cereal. This is evident from the remarkable solubility of the preparation, no less than one-half of it being soluble in cold water. The soluble portion contains chiefly dextrin and no starch. In appearance "grape nuts" resembles fried bread-crumbs. The grains are brown and crisp with a pleasant taste not unlike slightly burnt malt. According to our analysis the following is the composition of "grape nuts": moisture, 6·02 per cent.; mineral matter, 2·01 per cent.; fat, 1·60 per cent.; proteids, 15·00 per cent.; soluble carbohydrates, &c., 49·40 per cent.; and unaltered carbohydrates (insoluble), 25·97 per cent. The features worthy of note in this analysis are the excellent proportion of proteid, mineral matters, and soluble carbohydrates per cent. The mineral matter was rich in phosphoric acid. "Grape nuts" is described as a brain and nerve food, whatever that may mean. Our analysis, at any rate, shows that it is a nutritive of a high order since it contains the constituents of a complete food in very satisfactory and rich proportion and in an easily assimilable state.

New Inventions.

A BACTERIOLOGICAL TEST CASE.

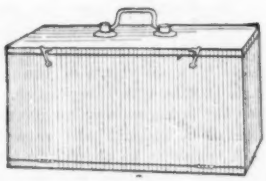
THIS case is designed for the use of the practitioner, enabling him to make bacteriological examinations for clinical purposes. The case complete with apparatus (see Figs. 1 and 2) weighs just five pounds; its length is just under 10 inches, its width is five inches, and its depth is five inches. In spite of this compactness the apparatus, stains, and reagents provided suffice for the differentiation of organisms according to Gram's method. The apparatus is quite sufficient for the clinical detection of the diphtheria, tubercle, and typhoid organisms. A small book of methods is provided with the case which gives the directions for use in preparing and staining specimens for microscopic examination. The case contains besides the reagents for this purpose the following apparatus: forceps, a platinum loop and point, dissecting needles, finger-pricker, 10 cubic centimetre glass measure, test-tubes, capillary tubes for

FIG. 1.



The case open.

FIG. 2.



The case closed.

taking samples of blood, sterile diphtheritic swabs, plain microscope slides, hollow-ground slides, watch glasses, filter papers, and a metal spirit lamp. The case is very neatly arranged and provides the practitioner with a simple and convenient means of making (with ordinary care) a correct bacteriological diagnosis from blood, sputa, urine, membrane scrapings, and the like. The bacteriological test case is designed by Mr. W. Martindale of 10, New Cavendish-street, London, W.

HARTMANN'S ADJUSTABLE ARM SLING.

THE Sanitary Wood Wool Company, Limited, of 26, Thavies-inn, London, E.C., have sent us a sling which they have recently introduced. It consists of a triangular

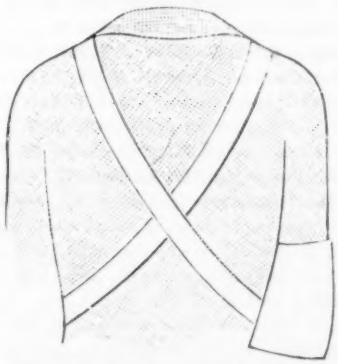
FIG. 1.

View of the sling in position from the front.

piece of unbleached calico, the right angle of which is turned up to take the elbow. To the other angles are fastened bands which pass one over each shoulder, and having crossed on the back are brought round the waist and

fastened in front. The special merits claimed for this sling are that the weight of the arm is much more evenly distributed than when the ordinary form of sling is employed and that there is no knot at the back of the neck. These

FIG. 2.



View of the sling in position from the back.

are certainly advantages and the claims of the makers seem to be justified. It is easy to fix the arm in any position desired and the weight is distributed over so large an area that it is not felt. As the sling can be turned inside out the same sling can be used for either arm. It is well and strongly made and is sold for one shilling.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

A MEETING of the Comitia was held on Oct. 25th, Dr. F. W. PAVY, Pro-President, being in the chair.

The PRO-PRESIDENT announced that the subject of the Weber-Parkes Prize Essay for 1903 would be, "The Channels of Infection in Tuberculosis, together with the Conditions, Original or Acquired, which Render the Different Tissues Vulnerable."

The PRO-PRESIDENT also announced that the following officers had been awarded the Blane medals:—Staff-Surgeon James M. Rogers, R.N., F.R.C.S. Eng., and Surgeon Oswald Rees, R.N., M.D. Glasg.; and that Mr. Alfred George Sworn had been appointed Eighth Jenks Scholar.

The following gentlemen, having passed the required examination, were proposed and admitted as members:—Henry Russell Andrews, M.D. Lond., L.R.C.P.; William Francis Victor Bonney, M.D. Lond., L.R.C.P.; Frederick William Collinson, M.D. Edin.; Karl Joseph Fürth, M.D. Freiburg, L.R.C.P.; Shapurji Hormasji Modi, L.R.C.P.; and John Lloyd Roberts, B.A., M.D. Lond., L.R.C.P.

Licences to practise were granted to 112 gentlemen who had successfully passed the required examinations.

Communications were received (1) from the Secretary of State for War thanking the College for their advice with regard to the investigation of the cause of dysentery among armies in the field and announcing the appointment of the following commissioners: Dr. W. J. Simpson, Colonel J. L. Notter, R.A.M.C. (Professor of Military Hygiene, Netley), and Major D. Bruce, R.A.M.C.; (2) from the President of the Royal College of Surgeons of England thanking the President and Fellows for the address of congratulation on the occasion of the Centenary Commemoration at the former College; and (3) from the Secretary of the College of Surgeons reporting certain proceedings of their Council on July 26th and Oct. 11th.

The audited accounts for the year ending Sept. 29th last were laid before the College and the quarterly report of the Finance Committee was received and adopted.

A report from the Pro-President was received on the International Congress of Medicine held at Paris in August last. A vote of thanks to the Pro-President for the manner in which he had represented the College was proposed by the Senior Censor (Dr. W. Cayley) and seconded by the Second Censor (Dr. Theodore Williams) and carried. A similar vote of thanks was, on the motion of the Second Censor, seconded by the Fourth Censor (Dr. T. H. Green), accorded to Dr. W. H. Corfield for representing the College at the International Congress of Hygiene and Demography held in Paris in August last.

A report was received and adopted from the Committee of Management, dated Oct. 8th. The report recommended that the Intermediate County School, Towyn, Merionethshire, should be added to the list of institutions recognised by the Examining Board in England for instruction in Chemistry, Physics, and Practical Chemistry.

Dr. Norman Moore was re-elected a member of the Committee of Management and Dr. Sidney Martin was re-elected a member of the Laboratories Committee.

A list of books presented to the library during the past quarter was received and the thanks of the College were ordered to be forwarded to the donors. The honorary librarian (Dr. J. F. Payne) drew attention to a manuscript (a medical treatise) in Greek of the date of the eighteenth century which had been presented to the College by Dr. J. Cavafy, and he also mentioned the valuable collection of manuscripts and old books in the possession of the College, which had been placed for inspection in the case presented to the College by Dr. P. H. Pye-Smith.—The Pro-President then dissolved the Comitia.

THE ENTRIES AT THE MEDICAL SCHOOLS.

BY the courtesy of the deans of the various medical schools we are enabled to give approximately the number of students who have entered upon medical study this year. There is some difficulty in obtaining figures made up to exactly the same period from the different schools, but the table of entries which follows is as complete as we have now been able to make it, and gives a general idea of the number of students who have this year decided upon following a medical career. From the last column it will be seen that there has been a general falling off in the entries compared with recent years, both in the metropolis and in the provinces.

ENTRIES FOR THE YEAR 1900–1901.

Name of medical school.	Full medical course.	Special courses.	Prelim. science.	Dental.	Full medical course, 1899–1900.	Increase or decrease in full medical students over or under last year's figures.
London.						
St. Bartholomew's	87	43	12	0	115	– 28
Charing Cross	18	30	4	33	18	No change.
St. George's	17	2	1	0	†	‡
Guy's	80	28	47	64	79	+ 1
King's College	25	150*	8	1	‡	‡
London	74	41	12	0	83	– 9
St. Mary's	43	34	8	0	50	– 7
Middlesex	22	37	0	12	24	– 2
St. Thomas's	47	7	11	0	60	– 13
University College...	35	55	45	0	45	– 10
Westminster	18	27	5	1	18	No change.
London School of Medicine for Women	23	1	14	0	20	+ 3
National Dental Hospital ...	—	—	—	10	‡	‡
Dental Hospital of London...	—	—	—	50	‡	‡
Provincial.						
University of Birmingham...	26	30	9	8	‡	‡
University College, Bristol...	13	2	6	3	‡	‡
University of Cambridge ...	115	—	—	—	‡	‡
University College, Cardiff	24	5	17	2	16	+ 7
Yorkshire College, Leeds ...	38	12*	31	5	26	+ 12
University College, Liverpool	43	9	16	11	57	– 14
Owens College, Manchester	43	52*	48	31	‡	‡
University of Durham, Newcastle-on-Tyne	27	27	60	6	32	– 5
University College, Sheffield	40	6	15	11	57	– 17

* Including Bacteriology and Public Health.
† Difficult to estimate, as most of the students are perpetual pupils.
‡ Information not supplied.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 3, 1900.

LONDON was the scene on Monday last of a manifestation of enthusiasm which may be described as of a national rather than a civic nature—just as London itself must be looked upon rather as an expression of the power, wealth, and progress of the Empire than as the largest city in England. It is possible that the unfortunate delay in the official reception of the City Imperial Volunteers by their grateful fellow-citizens deprived some of their opportunity of seeing the pageant, but it must have given a chance to many others, for there were quite enough spectators to over-tax the capabilities of those in charge of the route. From an early hour in the morning until the actual passing of the City Imperial Volunteers on their way to St. Paul's Cathedral, the line along which the troops were to march underwent a steady process of congestion. Each side-street gave its quota until a solid crowd was massed for the whole length of the five miles of thoroughfare between the arrival platform and the cathedral, through which a lane had to be cut for the City Imperial Volunteers to march. The police and the troops in charge of the route did their best to secure a free passage for the men whom the crowd were delighting to honour, but in many parts of their march through the metropolis our citizen soldiers had to take positions by storm, and with an exertion that must have reminded them too forcibly for amusement of the physical trials they had so recently undergone in war. That the crowd was unprecedented is, we understand, pleaded by the authorities concerned as an excuse for the complete break-down of all arrangements for maintaining a proper defile through which the City Imperial Volunteers might march. We do not hesitate to say that the excuse is completely unsatisfactory as exonerating everybody from blame, and one thing is certain—such a terrible muddle must not occur again. It is absolutely wonderful that the roll of accidents among the spectators amounted only to some 1500 cases, and that but one death has as yet been reported. The national rejoicing of last Monday could easily have been turned into a national disaster, and now that this fact is apparent it will be nothing short of criminal if the streets of London are again allowed to present such a spectacle of incipient riot.

The exploits of the City Imperial Volunteers are creditable enough to account for the popular enthusiasm, while their story conveys a lesson which medical men in particular will be able to appreciate, and which they will not be slow to urge upon the public. From the middle of January to the end of August the City Imperial Volunteers have been working for their country. They sailed on Jan. 13th and by the middle of February they had landed at Cape Town, 6000 miles away from their home. A week later they were at the Orange River and had entered upon a remarkable record of a 51 days' march averaging 13 miles a day. Following upon this came the second entry into Pretoria and Heilbron, the Frederickstadt fight, and the arrival at Pretoria for the third time. During this period of their service the City Imperial Volunteers marched 224 miles in 13 marching days, averaging 17¼ miles a day. From April 26th till August 23rd the total marching of the force amounted to 1118 miles accomplished on 75 marching days with an average of 13½ miles per day. Truly all will echo the words of the honorary colonel of the corps, Field-Marshal Lord ROBERTS, as he regretted his inability to be with the City Imperial Volunteers when, as he said, "you receive that richly deserved tribute of admiration which will undoubtedly be offered to you by your fellow-citizens." The work that has been performed by the corps makes it clear that the young civilian of the present day, though his occupation be mainly at desks, is a man of fine physique and well-developed powers of endurance, and in fact is as capable in every way of taking the field as any country-bred lad brought up to open-air pursuits. And the reason of this is not far to seek. It lies in the progress that has lately taken place in the conditions of urban life generally. In all our large cities, and in London as much as in any other city of the Empire, athletic pursuits of various sorts are now considered a necessary adjunct to a healthy life. The bicycle, golf, football, gymnasiums, swimming-baths, and the various organisations for cross-country runs provide the most popular forms of athletics; cricket, lawn tennis, and rowing are, however, nearly as valuable. Fifty years ago—and we have only to look at the great masters of early Victorian fiction to learn this—the relaxations of the city clerk were bounded by boxing and billiards, both of which were sought in the annexes of public-houses and in dubious company. Brave we are certain these young men of "the forties" were for it has been a tradition of old in the city of London to place a high premium upon personal courage, but no amount of billiards will train men to enable them to march under the arduous circumstances of war an average distance of 13½ miles a day for over four months. The people of London are right to be proud of their citizen soldiers, and to be proud also of the facilities which the capital city of the Empire is now giving for the up-breeding of a vigorous race.

But, as we have pointed out in another column, there remains much yet to be done in London besides the provision of opportunities for athletic amusement to perfect the public health. Among a thoughtful folk any pageant that marks the end of a great exploit should have its prophetic side. While the feeling should be one of honourable pride for past success, room should be left for determination to do better another time. Enormous progress in the methods of healthy living has enabled the City Imperial Volunteers to help the Empire in its time of need, and to win glory for themselves and a great reputation for their city. But the lesson to be learned is that such progress must progress. London grows larger and larger and no institution that suffices for its needs to-day will suffice for them to-morrow. The new municipal government of London will bring many of our professional brethren into immediate

touch with the needs of the city, and we hope that they will throw all their influence into the scale to make London the healthiest place in the world, as it is just now one of the proudest. Although the City Imperial Volunteers have done so well and although London has many reasons to congratulate itself upon the opportunities for healthy living that the metropolis offers to its citizens, still no one can deny that its atmosphere is murky, its slums are overcrowded, and its water-supply is not above criticism. We trust that the new corporations will work in a common line to remedy these things, and that members of the medical profession will take every opportunity to insist upon the importance of their so doing.

IN addition to the subjects of death certification, vaccination, and revaccination the members of the new Government will have to deal with what is rapidly becoming a burning question—viz., the remuneration of medical witnesses in courts of law. It is to the late THOMAS WAKLEY, the Founder and Editor of THE LANCET and the first medical coroner, that the profession is indebted for the Medical Witnesses Act, 1836. Prior to that date medical practitioners received no remuneration whatever for attending and giving evidence at coroners' inquests or even for making post-mortem examinations. Under the provisions of that Act, passed 64 years ago, every medical practitioner who is ordered by the coroner to attend an inquest is entitled to the sum of one guinea, with one guinea also for making a post-mortem examination should this be ordered by the coroner. These fees certainly do not err on the side of excess. On the contrary, as an inquest may be adjourned more than once and the medical witness be required to attend each time without any addition, the fee is most inadequate and such cases are by no means infrequent. Moreover, the order for the post-mortem examination under the Act of 1836 included also an analysis of the contents of the stomach or intestines. It was to be expected that these anomalies would be rectified in the Coroners Act, 1887, which repealed the Medical Witnesses Act of 1836, re-introducing with some slight modifications the sections relating to medical witnesses and post-mortem examinations. But the fees remain the same, while the resident medical officers of lunatic asylums, hospitals, and infirmaries receive no remuneration whatever; while some coroners maintain that the medical officers of workhouses are not entitled to any fee, and this remains a *quæstio vexata*. The analysis of the stomach is still included in the fee of one guinea for the post-mortem examination, though in practice it is rapidly becoming "more honoured in the breach than in the observance." Allusion was made in a former article[1] to a case related by the late Dr. ALFRED SWAYNE TAYLOR, in which a jar containing a stomach and its contents was hawked about to every metropolitan medical school in the vain endeavour to find an analyst who was willing to undertake the responsible duty for the sum of even *two* guineas, and for many years past the analysts of the Home Office, borough analysts, and county analysts have been more liberally remunerated for such responsible, delicate, and often difficult duties, which require a very completely furnished laboratory and a manipulative skill the result of long experience. Obviously, medical practitioners should be paid one guinea for each day of an adjourned inquest, and an increased fee for post-mortem examinations in cases of poisoning and other cases requiring the examination of every organ of the body.

But this is only a very small part of the grievances of medical witnesses. In the police-court the fee is the munificent sum of half a guinea per diem should the court be not more than two miles distant from the witness's residence, and one guinea per diem if it is beyond this radius. This rule applies to cases committed for trial by the magistrates. In cases disposed of summarily the medical witness frequently receives no fee at all, the magistrates observing that they have no funds at their disposal for such purpose. In the metropolitan and borough police-courts a fee of half a guinea is paid in such cases. In all seriousness we would ask, Is such a paltry sum an adequate remuneration to a professional gentleman for spending some hours, or it may be a whole day, in aiding the administration of justice? Passing on to the sessions and assize courts the fee is one guinea per diem. Here again we would remark that this is a most inadequate fee for being detained in court for a whole day and from day to day, even should the medical witness be resident in or near the town or city where the assizes are held. It involves early rising, late retiring, and endless trouble to attend to private practice as well as to satisfy exacting patients. The climax is reached when we come to the country practitioner who is called upon to give up his practice, leaving a locum-tenent in charge at a considerable expense, to attend a sessions or an assize case at a distant place. He receives one guinea a day, second-class fare each way, and two shillings per night. The consequence is that he returns home not only wholly unremunerated but actually out of pocket. That this is no exaggeration, no overdrawn picture, many of our readers can amply confirm, and we trust that they will do so. Mere grumbling will do no good whatever; but there is not a single Member of Parliament who should uphold such a very unrighteous cause as to compel a medical man to do his duty and to aid justice at a positive pecuniary loss to himself.

The scale of fees was fixed by the late Sir GEORGE GREY whose tenure of office as Home Secretary will be remembered only by elderly members of the profession. That it is very much out of date was acknowledged by Mr. ASQUITH, who made the ingenious suggestion that police surgeons, who were peculiarly liable to be called as witnesses, should demand additional remuneration from those who appointed and employed them; but the matter concerns not only police surgeons but every medical practitioner throughout England and Wales, any one of whom may be required to give evidence in a court of law. It is not only in cases of murder or manslaughter that medical evidence is required. In almost all crimes of violence such as wounding, bruising, or burning, and in cases of criminal or indecent assault or unnatural offences, medical evidence is almost invariably required—and these cases constitute a large proportion of the total number of indictable and other offences. This

[1] THE LANCET, May 6th, 1899, p. 1237.

fact furnishes a very good answer to the question, What about other professional witnesses? The members of no other profession are called upon to give evidence so often as are those of the medical profession—had they been so required in all probability the fees would have been increased long ago. It is only among that profession the duty of whose members it is to give death certificates without fee and who work gratuitously among the poor that the injustice of being compelled to suffer pecuniary loss would so long have been endured.

Nothing of permanent value can be done till Parliament meets for the despatch of business, which may not be till next year, but meanwhile much may be done towards effecting a reform if all those members of the profession who have been compelled to be medical witnesses at a pecuniary loss will submit their cases in detail to their Parliamentary representatives.

A NEW epoch in the history of Greater London is marked by the founding of the metropolitan boroughs beyond the boundaries of the ancient City of London. Important and powerful corporations are to replace vestries, and for the first time many of the people of London have been called upon to decide what manner of men shall represent them in the management of their important municipal affairs. We fear that many, perhaps the majority, of those most capable of forming a just opinion of the contending candidates, have yielded to the feeling that they have had enough of elections for the present and have allowed themselves to believe that they had neither leisure nor opportunity to inquire as to the respective merits of persons of whom in many instances they have heard for the first time this week. They have said that they have little to complain about. They have allowed that the streets are not kept as clean as are those in the City, that snow is allowed to lie about them too long, and that their lighting leaves something to be desired; but their view has been that things might be worse and that it is a good thing that anyone can be found to be a member of a borough council. Such a typical citizen, while saying that he for his part would not serve on a council, may add that it is best that he should not vote, because as likely as not he would vote for the wrong man. So he is willing to leave the election to those who know. Thus, to use the expression of the Bishop of ROCHESTER, the casual man is inclined "to let apathy overcome him." This is a most unsatisfactory state of things, which has arisen from the huge size of London and the arbitrary manner in which its domestic affairs have been delegated to a large quantity of little vestries. And this is the state of things which every medical man will rejoice to see ended by the behaviour of the new municipal government.

Lord ROSEBERY in an address delivered on Friday, Oct. 26th to the Christian Social Union gave some very good advice as to the approaching elections. Some of his remarks were so obviously true that they appeared trite, but it is a commonplace of life that it is the obvious which most often escapes notice, and a loss of perception of the relative importance of events is often shared by a vast majority of a great nation. "Our interests are not all in South Africa," said Lord ROSEBERY, "and the inhabitants of this great metropolis should remember that not all their interests are locked up 6000 miles from home," a truism not universally appreciated at the present moment. Lord ROSEBERY pointed out the great good that might follow upon the revolution in the municipal management of London, and although the beatitude of the millenium is not to be expected from the deliberations of the borough councils, we agree with his lordship, who speaks not only as a wise man but also with the special authority of an ex-chairman of the London County Council. London has outgrown vestries, and the new duties of the borough councils will be by no means trivial. The men who should be selected to sit on them should be those who come forward, not to serve themselves but the public interest. They should not wish to use the Council as a preliminary debating society through which to pass on their way to St. Stephen's. They should be uncorrupted and incorruptible. They should not be chosen by the political label they may choose to adopt; they should be men whose only interest is that of their constituencies. They should be men of business. A fair proportion of the recent candidates seem to have fallen under this category. There are two classes of persons, who, according to Lord ROSEBERY, are *primâ facie* likely to be undesirable borough councillors. Builders and owners of property are, he thinks, open to suspicion. Of the builder he would ask where and what he has built and of the owner where is his property. The list, we think, might be extended. Why, for example, should not publicans and public-house proprietors be included in it? What should be said of owners of factories which poi on the air with foul smoke? But the question of the housing of the poor is evidently the one which Lord ROSEBERY has at present most at heart, and the medical bearings of this question in its relation to public health make it one of the first interest to medical men.

The people of London have been scandalously neglected up to the present time by their representatives on the vestries, and no one can be reckoned a satisfactory councillor of the new boroughs who does not use his every endeavour to obtain for London:—

1. Cleanliness in the streets.

2. Purity of the air—so far as this can be done under the provisions of the present law.

3. A constant and pure supply of water—so far as it can be obtained under the present enactments.

There are those who look upon dirt in the streets as the normal state in winter, who like fog, and who are indifferent concerning the water that they drink. Such men should not be councillors. The streets in the City of London are washed every night. There is no reason why the streets in the new boroughs should not be washed. No one should be elected to the new councils who is not in favour of clean streets. The air of London is poisoned by the smoke from numerous factories, restaurants, and electric-light stations. The Public Health (London) Act, 1891, makes ample provision for prosecution in cases in which the air is polluted by smoke. The vestries have generally neglected their duties in protecting the people against this unwholesome nuisance. Every councillor should be as active as his predecessors have been supine. The metropolitan water companies are under a statutory

obligation to supply the necessary amount of water at a moderate price. The laws in force for the protection of the people against the exactions and negligence of the companies are, as readers of THE LANCET know, numerous and complex. The vestries, generally speaking, have entirely neglected even to attempt to protect the numerous individuals who have suffered from the defaults of the water companies. This must be altered by the new borough councils, which should be strenuous in securing for the water consumers of their boroughs the benefits which it is the duty and the privilege of the metropolitan water companies to afford.

Annotations.

"Ne quid nimis."

NORTH OF IRELAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE opening meeting of the session of 1900-1901 of the North of Ireland Branch of the British Medical Association was held in the Museum, Belfast, upon the appropriate date of the festival of St. Luke (Oct. 18th). The chair was occupied by the President of the branch, Professor Byers, who delivered his opening address. After a few introductory remarks Professor Byers went on to say that he thought the present occasion to be an admirable one upon which to attempt to answer the question, "How has the science and art of medicine in its various departments been influenced by the wonderful discoveries of this century, which dazzle us not merely by their ingenuity and by the rapidity with which they have followed one another, but still more by their practical application in this most utilitarian age to the diagnosis, prevention, and treatment of disease?" Bacteriology and the new science of hæmopathology had opened up a new and most promising field for original investigation. Instances were then given of the results obtained by investigation of the blood, such as the differential diagnosis between malaria and typhoid fever, the value of "vaccination" against typhoid fever, and of the administration of calcium chloride in hæmorrhages or of alkalies in scurvy. The early cases of plague in Glasgow had been verified by an examination of the blood and thus preventive measures were at once taken, with what success they were all aware. Professor Byers concluded this portion of his address with an appeal for State endowment of research laboratories. He then went on to speak of the British Medical Association, pointing out how it had originated as a provincial society formed as a protest against the tendency to locate medical organisations too much in the metropolis. With regard to the scientific work of the Association, that had been well carried out, except that the amount given as grants in aid of scientific research was ridiculously small. He himself had been able to bring about an alteration in the composition of the Scientific Grants Committee which would, he hoped, in the near future result in these grants being more widely diffused. As regards the work of the Association for the maintenance of the honour and interests of the medical profession it was evident that the members of the profession thought that the Association had not done enough in this direction. Hence the multiplication of defence societies and the like, which multiplication resulted in loss of money and in a waste of machinery. Surely it would be better to have one great national medical association. The British Medical Association must consider in the future more than it had done in the past the honour and interests of the profession. Professor Byers then referred to the Reorganisation Committee which was appointed at Ipswich and made an interesting prophecy as to the questions which would probably be submitted to the branches in the provisional report of that committee. The branches would probably be asked to discuss the constitution of the Council, the best means of obtaining a thorough representation of all the members of the Association, medical defence, machinery for watching legislation so far as it affected medical interests, a professional information bureau, and the establishment of a benevolent fund. Organisation and union were what the profession needed most. Professor Byers's able address raised two points which are doubtless most important. With regard to the matter of State aid for scientific research we fear that those who look for it look for a chimæra. Compared with foreign Governments the British Government does nothing to help science. Private benevolence is good and has done wonders from the days of Rahere down to the foundation of the Thompson Yates laboratories at Liverpool, but in matters in which the public health is concerned we think that private benevolence should be supplemented by State aid. With regard to the more personal matter of union in the medical profession the cure for the present distress rests with the members of the profession themselves. How great, as Professor Byers pointed out, would be the influence upon a Government department of a solid demand from the members of the British Medical Association. Everyone knows the trite saying, "Union is strength," but how few medical men really set themselves to realise such union as might be realised—one which if used rightly would have incalculable power for good, not merely in purely medical matters, but in such great questions as the housing of the poor, a pure water-supply, the adulteration of food, and the purifying of the atmosphere of our great towns.

PLUMBERS' WORK IN RELATION TO PUBLIC HEALTH.

AMONG a steadily increasing section of the medical profession who take more than a general interest in the important question of plumbers' work Dr. S I. Mansel-Howe occupies a prominent place. Dr. Mansel-Howe has original notions, and original notions, if not always acceptable, are generally interesting. This is perhaps the case in relation to some of the suggestions made in a lecture delivered by him at the Town-hall, Maidstone, under the presidency of the Mayor, last spring, and recently printed in pamphlet form.[1] Mingled with much excellent advice upon the sanitary arrangements of our dwellings is an important departure from the commonly accepted system of procedure which is, unless in the case of terrace houses, unlikely to meet with general acceptance. The distribution of gully traps at the ground level, admittedly a weak point in all systems of drainage, owing to the accumulations of refuse which they frequently retain, is one of his principal objections. Of course, the object of these gullies is to cut off all sink wastes and rain-water pipes from immediate connexion with the house drain. Dr. Mansel-Howe's proposal virtually amounts to re-connecting these pipes, placing them in the same relationship to the house-drain, through the medium of a disconnecting chamber, as the house-drain bears to the public sewer. Such a plan would involve in many instances almost a double system of drains and manholes, with an accompanying increased percentage of risk for the escape of drain air. This, apart from its economic aspect, seems a questionable advantage. Briefly, he proposes to carry separate drains from the several rain-water pipes, sinks, and bath-wastes into a chamber formed

[1] Printed by W. H. Hodge and Co., 34, 36, North Frederick-street, Glasgow.

in the upper part of either the inspection chamber at the upper end of the house-drain or of the disconnecting chamber at the lower end of the house-drain. Thus, the usual chamber is formed but is provided with a false floor placed a short distance above the bottom of the manhole and fitted with an air-tight cover to give access to the lower chamber. In this floor all the gullies are to be placed, each having a short connexion into the channel of the lower chamber. The upper chamber is ventilated by means of a three-inch anti-syphonage pipe which is carried up above the roof and which is common to all the sink and lavatory fittings, always excepting the urinal or slop sink; also, of course, it is ventilated by the several waste-pipes discharging into this chamber. It is not very clear how it is proposed to prevent the air from the gully-chamber escaping up the rain-water pipes and discharging near windows at low levels, but this has doubtless been provided for in the scheme. The lower chamber is ventilated by the soil-pipe and by the soil-pipe anti-syphonage pipe which Dr. Mansel-Howe proposes should be carried down for this purpose. He entertains a strong dislike to all puff-pipes from sinks and valve-boxes being discharged anywhere below the roof level. He also objects, and with good reason, to the so-called "fresh-air inlets" so frequently met with in such unsuitable positions in our crowded thoroughfares. These, he maintains, should always be carried up above the roof level. Dr. Mansel-Howe's scheme has been well thought out and should receive the consideration of those interested in the advance of sanitary work.

A CASE OF FAMILY PERIODIC PARALYSIS.

THE disease known as "family periodic paralysis" is a very rare and striking condition and while in all only four instances have been published only three of them strictly conform to the conditions necessary—viz., periodicity, occurrence in more than one member of a family, and associated spinal paralysis. Dr. Leo M. Crafts, professor of nervous diseases in the Hamline University, Minneapolis, U.S.A., records the following interesting case in the *American Journal of the Medical Sciences* for June. A young man, aged 37 years, a commercial traveller, with large hands and feet and an awkward waddling gait suggestive of the early stage of pseudo-muscular hypertrophy, active and energetic, has been under observation at intervals for about seven years. His physical development is remarkable. "The lower legs, the hips, and the thighs are abnormally large, strikingly like those of pseudo-muscular hypertrophy, and the lumbar curve is emphasised. The arms, too, are moderately heavy, but the muscular strength does not correspond at all to the development, and while it is not weak it is distinctly less than normal and he has comparatively little power of endurance." His height is five feet five inches and his weight is 140 lb. The calves measure 15¼ inches, the thighs 19¼ inches, and the fore-arms and upper arms 11 inches each. The superficial veins in both upper and lower extremities are very large and prominent. The family history is distinctly neuropathic. The father was a heavy drinker, the mother was of frail health, one aunt was markedly eccentric, and two or more ancestors had died from "paralysis." The patient himself at the age of 12 years was suddenly attacked with illness one morning in bed and was unable to get out, being only able to move his arms and legs slightly and with great difficulty. He improved in a few days, but had a recurrence six months later, and other attacks since then at varying intervals. A year after the first attack he had a severer attack and three years later another serious attack. His last serious attack, the worst of all, occurred three years ago following extreme exertion. He suffered from great exhaustion and muscular feebleness and also from constant vomiting, fluid in character and charged with bile. He became pale, sallow, and collapsed, with small rapid pulse and great prostration which lasted three days, after which he recovered. The attacks had recurred periodically and were as a rule preceded by constipation. A frequent immediate cause was over-exertion, either prolonged or short and sharp, as, e.g., running to catch a train while carrying heavy bags. "Indiscretions in diet seemed to have a direct bearing on the occurrence of the condition and he has learned to avoid certain foods, such as rich pastry, sweet preserves, and cheese." The onset of an attack was always gradual, usually beginning simultaneously in the hands and feet. Over-exertion while an attack was subsiding generally caused recurrence or altered a partial seizure to a complete one. The muscles of the limbs and body felt soft and flaccid and entirely relaxed in an attack; the chest-wall hardly moved and respiration seemed entirely confined to movements of the diaphragm. The blood showed marked lymphocytosis, and analysis of the fæces yielded a toxic substance which produced in rabbits a paralysis lasting 48 hours. Bernhardt regarded the affection as allied to the dystrophies, but its exact pathology is as yet obscure, though Dr. Crafts's observations confirm its toxic nature.

THE TERM "INFLAMMATION."

DR. ANDREW H. SMITH of New York recently published in the Transactions of the Association of American Physicians a most interesting and in some respects original paper bearing on the above subject. Dr. Smith holds views almost identical with those expressed by Dr. J. F. Payne at the meeting of the British Medical Association in 1898 with regard to the anomaly of the term "inflammation" as used now—that is, when the fact of the remarkable advance made in pathology is taken into consideration. Dr. Smith, however, is more bold in setting forth his opinions and in addition suggests a remedy. He points out that of the four cardinal symptoms which were originally held to constitute the conditions known by the name of inflammation only one is still insisted upon to identify the inflammatory process—namely, swelling. He shows that by doing away with all but this one test the difficulty of defining the term is immensely increased, and further insists that the difficulty is inevitable so long as we insist upon the idea that a new action is set up by some exciting cause and that once initiated this new action goes on independently and works out results due to itself. After describing the action of inflammation as it appears to him Dr. Smith claims that the termination "itis" should be dropped for the reason that most of the phenomena heretofore included under the term "inflammation" are manifestations of the local action excited by a micro-organism or by a poison circulating in the blood. Such action should be expressed by a termination to be affixed to the name of the organism or poison, if the same be determined, or to the organ or part affected in case the particular infecting organism or poison be not identified. Attention is drawn to the fact that we have a universally accepted precedent in the case of tuberculosis, and Dr. Smith is of the opinion that if a general name is demanded as a substitute for inflammation no one word ought to be made to include all the heterogeneous unrelated processes and conditions which have been comprised under that term. At least three words would be required to express different kinds of *noxæ* acting in different ways and leading to essentially different results. These, he thinks, might be "traumosis" to include wounds and injuries, "toxosis" to include the local action of poisons in the blood, and "bacteriosis" to include the action of micro-organisms. The *New York Medical Record* of Oct. 6th has a highly eulogistic

article upon Dr. Smith's suggested radical innovations in medical and surgical phraseology, but is inclined to think that the medical profession is too tightly bound by custom and routine to be easily persuaded that the benefits to be derived from the proposed changes will outweigh the disadvantages and trouble consequent upon such changes. The *New York Medical Record*, however, truly says that Dr. Smith's courageous arraignment of the inappositeness of the term inflammation as used now is a valuable contribution to latter-day scientific literature, which should embolden those less fearless to follow his sagacious lead into this interesting field of inquiry. The most valuable outcome from the propagation of the view that inflammation is in no proper sense a new force, an enemy projected into the arena, a disturbing influence to be dreaded, a disease to be "treated" will be that its treatment will be abandoned. The cause of the true malady will be sought for and when found attacked. The direction of modern therapeutics, too, tends towards the method of not treating the disease so much as the patient in acute infectious diseases. If Dr. Smith's conclusions and the conclusions of those who have written to the same end but have not stated the case so strongly are accepted their communications will serve a most beneficial purpose and should pave the way to a more enlightened therapy. Since the latter is the very essence of the physician's life-work the importance of the theme cannot be over-estimated.

BLACKWATER FEVER.

IN the *Deutsche Medicinische Wochenschrift* of Oct. 4th Dr. Hans Ziemann of the German navy gives some account of the views to which he has been led by his experience of blackwater fever at Cameroon, West Africa. He has never found any specific exciting cause for the disease. He considers that in some very unhealthy malaria districts a predisposition to blackwater fever becomes established in a certain number of persons, and that in general this predisposition increases with the number of attacks of malaria which the patients have; but, on the other hand, it may diminish if some power of resistance to malaria is attained. This predisposition may affect the most robust members of quite healthy families, but it is more apt to occur in persons in whom the hæmorrhagic diathesis may be suspected and in those who live under depressing conditions of mind or body. It seems to arise most readily in persons who have been infected with the minute parasites of tropical or æstivo-autumnal fever. The predilection of blackwater fever for certain districts may be owing to local conditions increasing the virulence of the parasites, their essential characteristics being otherwise unchanged. In Cameroon, where blackwater fever is so dangerous, only a few sexual parasitic forms, such as crescents, are to be found in the blood. In Italy, on the other hand, these forms are of very frequent occurrence and are most abundant in cases having a tendency to recover. In Cameroon there is often a great disproportion between the clinical symptoms and the number of parasites in the peripheral blood, but in Italy, where blackwater fever is extremely rare, although infection with parasites closely allied to those of tropical fever is very common, Dr. Ziemann seldom met with this disproportion. Predisposition being assumed in all cases as already mentioned, all the conditions under which blackwater fever arises may be reduced to four—namely, (1) in the course of an attack of malaria without quinine having been given, but this is rare; (2) in the course of an attack of malaria treated with quinine, this being by far the most common condition; (3) in patients who have recovered from malaria and have no parasites in their peripheral blood but are nevertheless taking quinine; and (4) in patients who have recovered from malaria and blackwater fever and have no parasites in their peripheral blood and are not taking quinine, this condition being rare. Dr. Ziemann, therefore, recognises no distinction between the so-called quinine hæmoglobinuria and hæmoglobinuric malarial fever. Blackwater fever occurs also among the Togos negroes who have never taken quinine, and the same thing has been observed on the Congo. Dr. Ziemann has recorded a unique case in which tropical fever was diagnosed microscopically, and in this patient hæmoglobinuria was brought on by 0·01 gramme (one-sixth of a grain) of quinine. On the west coast of Africa it is by no means uncommon for from 0·1 gramme to 0·25 gramme (from one and a half grains to four grains) of quinine to produce hæmoglobinuria in predisposed persons suffering from malaria, so it is evident that in that district quinine should be administered with caution. Dr. Ziemann has found benefit from injections (Infusionen) of physiological salt solution in anuria and from chloroform solutions given by the mouth in obstinate vomiting.

THE INCORPORATED SOCIETY OF MEDICAL OFFICERS OF HEALTH AND THE DIAGNOSIS AND TREATMENT OF PLAGUE.

WE are informed by the editor of *Public Health* that the Council of the Incorporated Society of Medical Officers of Health have arranged for a lecture and demonstration upon Plague to be given on Saturday next, Nov. 10th. Mr. Cantlie has accepted the task of dealing with the etiological and clinical parts of the subject and Dr. E. Klein will undertake the bacteriology. Dr. A. K. Chalmers will describe the suitable preventive measures, more especially with regard to the line followed at Glasgow. The meeting for this purpose is fixed for 2.30 P.M. on Saturday next, the day following the ordinary meeting of the society, and will be held at the Examination Hall of the Conjoint Colleges, Thames Embankment. The meeting will be open to the whole profession, but admission will be by ticket, application for which is to be made to the honorary secretaries, 197, High Holborn, W.C.

INFECTION THROUGH A MANGLE.

DR. JOSEPH PRIESTLEY, the medical officer of health of Lambeth, presented to his vestry on Oct. 25th a most interesting report upon an outbreak of typhoid fever in the parish due to infected mangles. The incidence of the disease was practically limited to three streets covering an area of half a square furlong and containing 124 houses at rents varying from 10*s.* to 14*s.* a week. There were in all 41 cases occurring in 24 houses, and 16 of the patients were males, while 25 were females. The first case was notified on Sept. 7th. There was much inter-communication between persons and families living in different houses, but the most important means of inter-communication was found to be in connexion with the mangling of clothes. Many of the inhabitants of the area after washing their clothes in their own homes took them to some neighbour to be mangled. Owing to this custom bedding often stained with urine and fæces from typhoid fever patients were mixed together with, and mangled in the same machine as, bedding from non-infected houses. Thus the disease was spread. Four definitely infected mangles were traced and these four were responsible for 26 cases of typhoid fever. On August 14th a child, aged two years, sickened and was treated as suffering from infantile diarrhœa. The clothes from this house were washed and then sent to a house where there was a mangle —namely, 14, S—— Place—in which house there was also a case of unrecognised typhoid fever which was not diagnosed until about three weeks had passed. 12 cases of typhoid fever were directly traced to this infected house. Nine infected houses gave rise to 17 secondary cases due to infection from

previous patients before such patients were removed to the hospital. Undiagnosed cases were also responsible for the spread of the disease. Thus, one child living in F—— Street whose case was unrecognised for a space of 26 days infected directly three other persons who in their turn infected nine more. One case presumably arose from the eating of ice-cream. Dr. Priestley lays special stress upon the paramount need for early diagnosis. Bacteriological examination is supplied free of cost by the vestry and is being more and more used. Early removal to hospital is also imperative, there being no means of home isolation in the neighbourhood.

URETERAL ANASTOMOSIS.

IN the *Journal of the American Medical Association* of Oct. 6th is published an important paper on this subject which was read at the recent meeting of the American Medical Association by Dr. Howard Kelly of Baltimore. Under the subject are included two operations—uretero-ureterostomy (in which a piece of ureter is sacrificed and the ends are brought together) and uretero-cystostomy (in which the vesical end of the ureter is sacrificed and the upper end is anastomosed to the bladder). A ureteral anastomosis is as difficult an operation as can be performed, fully as delicate as any eye operation. It is usually required for accidental injuries of the ureter during operations, usually of the pelvic portion—a fact of importance for successful anastomosis. The ureter may be cut in mistake for a blood-vessel or torn out of the pelvis with an adherent ovarian cyst, myoma, pyosalpinx, or similar condition. It is voluntarily sacrificed when it passes through a carcinomatous mass in the broad ligament. Before performing the difficult operation of anastomosis it is important to make sure that the ureter is performing its function, for occasionally the disease which necessitates the pelvic operation has occluded the ureter and led to abolition of its function. The success of an anastomotic operation depends on accurate union without injury of the delicate ureteral structures, which is rendered difficult by their flaccidity and sometimes by difference of calibre. To overcome these difficulties Dr. Kelly has constructed a ureteral guide which looks like a little hammer with the handle attached at an angle and flush with one end. The head or guiding part is four centimetres long and rounded at the free end. Near the end is a groove in which to tie the ureter in order to fix it during anastomosis. The following instruments are needed: delicate ureteral tissue forceps, fine scissors, a tiny round curved needle with the eye open at the end, and delicate needle-forceps. The operation is performed thus: a fine silk mattress-suture is passed through the under surfaces of the cut ends and tied, bringing them accurately together. A longitudinal slit is made in the upper end of the ureter two centimetres distant from the extremity just large enough to admit the guide easily. The rounded end of the guide is pushed through the slit into the ureter down through the open end and well into the lower end, where it is loosely tied in the groove. Fine silk sutures, interrupted or mattress, are passed at intervals of from one to one and a half millimetres through all the coats except the mucosa. During the suturing the ureter can be rotated from side to side by moving the handle of the guide. At the completion the ligature tied around the guide is cut and the guide is withdrawn. The success of the suturing may now be tested by injecting water through the slit and seeing it flow freely towards the bladder without leakage. The slit is readily closed by three or four fine mattress sutures of silk. Dr. Kelly has the guides made in three sizes. When there is a marked difference in calibre between the upper and lower portions of the ureter he uses a large size to dilate the smaller end and to facilitate approximation. A surgeon who would rarely have to do this operation and has not the "guides" can easily extemporise one by cutting a piece of wood to the desired shape, fixing a thread or a long needle in one end, and sterilising this makeshift. Uretero-cystostomy is similarly performed. A slit is made in the peritoneal surface of the bladder, the guide slipped in, the right or left vesical cornu pushed out in the direction of the divided urethral end, and an opening made at the nearest point just enough to admit the ureter. The guide is then slipped into the ureter and tied, and the ureter with its lower end slit up half a centimetre is drawn well into the bladder and stitched on all sides to the muscular vesical walls. The guide is removed and the abdomen is closed, a gauze drain being left in in the event of leakage.

MEDICAL MUNIFICENCE.

IT is occasionally said that although members of the medical profession willingly render gratuitous service to hospitals they but rarely subscribe to the funds of these institutions; indeed, in the unhappy dispute that has recently arisen between the medical staff and the managers of the National Hospital for the Paralysed and Epileptic this taunt has been levelled against the staff. That the reproach is unmerited is well known to those connected with the management of medical institutions, and a conspicuous instance to the contrary is to be found in the donation of £5000 by Dr. A. Garrod Thomas as the nucleus of a fund for the erection of a new hospital at Newport. The Newport and Monmouthshire Hospital was established in the year 1867 with accommodation for 50 patients and for a time sufficed for the needs of the district, but the rapid growth of the town and the port placed a great strain upon the resources of the institution, and the outcome of Dr. Garrod Thomas's liberality has been the erection of a new building at a cost of about £30,000, of which all but £8000 have been subscribed. For the liquidation of the latter sum there was held in Newport for four days commencing Oct. 23rd a bazaar the proceeds of which contributed no less a sum than £5600.

PNEUMOCOCCIC PERITONITIS.

PNEUMOCOCCIC peritonitis, like pneumococcic arthritis,[1] is a condition which, though well known to continental writers, seems to have been less commonly recognised in this country. In children primary pneumococcic peritonitis is described as rather frequent by French writers. Cases have been described by MM. Sevestre, Dieulafoy, Brun, Moizard, Kirmisson, Galliard, Remy, and others. In adults, on the contrary, the disease is extremely rare. In the first volume of his valuable "Cliniques de l'Hôtel-Dieu" M. Dieulafoy states that only two cases out of 17 occurred in adults. At the meeting of the Société Médicale des Hôpitaux of Paris on July 13th M. Menetrier and M. Legroux described two cases. A vigorous, healthy man, aged 32 years, was suddenly seized with violent colicky pains unaccompanied by diarrhœa or vomiting. As they persisted he took on the third day a saline aperient which produced vomiting and passing diarrhœa. Continuing to suffer, he entered hospital on the sixth day with the typical *facies abdominalis*, drawn features and sunken eyes. The tongue was moist and furred. There were slight tympanites and diffuse abdominal tenderness. The urine was scanty and very albuminous. There was no fever. On the following days the pains were excessive and the tympanites became more marked and interfered with respiration. He vomited once and the stools were liquid. The temperature was subnormal, 96·8° F. Death occurred on the tenth day. At the necropsy general purulent peritonitis was found. The intestines were adherent to one another and to the abdominal wall. A

[1] THE LANCET, June 16th, 1900, p. 1740.

coating of yellowish adherent pus covered the intestines, viscera, and abdominal wall. The pus when stained showed on slides numerous microbes of varied form. Cultures gave colonies of the pneumococcus and colon bacillus. The microbes other than the pneumococcus were thought to be of cadaveric origin. This case conformed to the type of ordinary acute septic peritonitis. In the second case, on the contrary, the peritoneal symptoms were masked by others. A man, aged 35 years, was suddenly seized with acute abdominal pain, vomiting, and diarrhœa which ceased on the following day and were followed by constipation. There were tympanites and slight splenic enlargement. The pain diminished and was provoked only by pressure. The pulse was 115 and the temperature was 104·2° F. The urine contained one gramme per litre of albumin. Thrombosis of the right popliteal and left radial artery took place. On the twenty-second day the abdomen again became tympanitic and diarrhœa alternated with constipation. On the twenty-fifth day there was vomiting and a zone of dulness was found in the flanks. Persistent hiccough began and the patient became comatose. Two days later he died. At the necropsy two or three litres of reddish turbid fluid containing flocculi were found in the peritoneum. Cultures yielded the bacterium coli, the staphylococcus albus, and the pneumococcus. The pneumococcus was also found in a clot from the Sylvian artery which had been thrombosed recently—not more than 40 hours before death. The clot was composed principally of polynuclear leucocytes. There were infarcts in the spleen and kidneys. M. Menetrier and M. Legroux thought that the multiple thrombosis was due to pneumococcic infection of the blood and that this led to agglomerations of phagocytic leucocytes in the vessels which obstructed the circulation.

PROGRESS IN THE TREATMENT OF IDIOTS, IMBECILES, AND DEFECTIVES.

IN the Presidential Address before the Medico-Psychological Association, which is published in the October number of the *Journal of Mental Science*, Dr. Fletcher Beach referred to the progress which had been made in the treatment of "certain defective classes of society, such as idiots, imbeciles, the feeble-minded, the epileptic, and juvenile delinquents." The pioneer to whom belongs the honour of having created the true method of teaching idiots and imbeciles was Séguin, who in 1841 published his "Théorie et Pratique de l'Éducation des Idiots," based on his experience and the means adopted by him for training and educating idiots at the Hospital for Incurables in Paris. His work was continued at the Bicêtre, and five years later Séguin published his admirable book, "Traitement Moral, Hygiène et Éducation des Idiots, at des autres Enfants Arrières," which still continues to be the manual for all those who are interested in the education of idiots. Special institutions for idiots made their appearance after this in various countries—e.g., Guggenbuhl's Institution for Idiots at Abendberg, Switzerland (1845), Park House, Highgate (1848), and the Earlswood Asylum for Idiots, Redhill (1855). Since then various institutions have been provided for the same purposes, the most notable of these being the Royal Albert Asylum, Lancashire, for Idiots and Imbeciles of the Northern Counties (1870), and the Metropolitan Asylum at Darenth (1879) for the London district. Similar institutions have sprung up in Scotland, Ireland, the United States, and in Canada. With regard to the degenerates of the "moral imbecile" type, Dr. Fletcher Beach points out that whereas they were kept in prison 60 years ago they now find their way into institutions for idiots and imbeciles. They are a difficult class to deal with, for they are often intellectually sharp and clever, but they are thievish, lying, and sometimes the subject of graver criminal tendencies. The late Dr. Kerlin, who was superintendent of the Pennsylvania Institute for Feeble-minded Children, was of opinion that they should not be educated, as it increased their power for evil, but that they should live in separate buildings apart from other children in order not to infect them with their bad tendencies. Dr. Jules Morel of Belgium has stated that they should be received into special "institutions for the degenerate," as they are not fit subjects for lunatic asylums, reformatories, or prisons, in which opinion Dr. Fletcher Beach concurs. In 1899 the Elementary Education (Defective and Epileptic Children) Act was passed, whereby a school authority may make arrangements for ascertaining "what children in their district, not being imbeciles, and not merely dull or backward, are defective—that is to say, what children by reason of mental or physical defect are incapable of receiving proper benefit from the instruction in the ordinary public elementary schools," so that they can be sent to special classes in institutions provided by the local authority for their education and training. Indeed, such special "classes" had already been established and in operation since 1892 in parts of London, Leicester, Birmingham, Brighton, Bristol, Nottingham, and a few other towns, so that when the Act came into force in 1899 its provisions of the Act at once became efficient. Dr. Fletcher Beach refers to similar establishments on the continent and in the United States and he hopes that much good will come from them. Reference is made to "colonies" and farms for epileptics which are regarded as useful medical institutions which may be made in a measure self-supporting. The growing tendency of recent legislation to provide reformatory treatment or detention in an industrial school for youthful offenders is also praised as a step in the right direction.

DENTAL SURGERY AND THE SERVICES.

A MATTER of considerable importance in connexion with War Office reform is dealt with in the current number of the *Journal of the British Dental Association* in an article entitled, "On the Need for the Recognition of the Assistance of Dental Surgeons by the War Office and Admiralty." The writer of the article, after reviewing the attempts which have been made in the past to initiate the institution of some system by which efficient dental assistance might be provided for our soldiers, sailors, and recruits, proceeds to discuss the conditions which obtain at the present time in this country and in various foreign States. He criticises severely the list of instruments provided for the use of army surgeons, and brings evidence to show that there is "no effective conservative dental aid provided in the British Army." He then deals at length with the regulations issued by the War Office and Admiralty for the guidance of medical examiners of candidates for commissions and of recruits, a large number of whom are rejected, when otherwise fit, solely on account of defective teeth, whereby a great loss to the nation is needlessly incurred. Great stress is laid in the article on the point that in making these examinations army surgeons are placed on a footing entirely different from that of their civil brethren, inasmuch as they are called upon to pass judgment on work executed by qualified dental surgeons of a kind which they themselves would be the last to undertake to perform. The Bill now before Congress in the United States of America, which has passed the Senate Committee, to provide contract dental surgeons without military rank for the American army, is referred to and the article concludes by suggesting the lines upon which reform might be effected in this country. After pointing out that there are many difficulties in the way of any change analogous to that provided for by the American Bill the writer of the article shows

that the treatment of recruits is perfectly feasible, and he insists further that the assistance of dental surgeons in the examination of candidates for commissions and of recruits is called for in justice to all concerned—namely, dental surgeons, army surgeons, the candidates themselves, and the nation at large.

CITY AND COUNTY OF CORK MEDICAL AND SURGICAL SOCIETY.

THE meetings of this society were resumed on Oct. 24th and the president, Dr. Henry Corby, professor of midwifery in Queen's College, Cork, took "The Medical Profession" as the subject of his inaugural address. Membership of such a society as theirs, he said, had the great advantage for medical men in general that it provided them with opportunities for speaking in public and aided them in acquiring that most useful accomplishment, the ability at any moment to express their ideas in a few pithy sentences. Oratory in the true sense was a rare talent, but even the least pretentious of public utterances lost something of its effectiveness when the speaker was unpractised—a fact not always remembered as it ought to be, for men of great mental endowments had been known to become embarrassed when suddenly called upon to make a speech after dinner. After referring to the multiplicity of authorities granting degrees and licences and the difficulty experienced by the general public in appreciating the differences which exist between the various qualifications Dr. Corby asked, "Why not establish the one-portal system?" and proceeded to point out the advantages of the uniformity which would thereby be secured. He then touched on the falling off in medical fees caused by competition and overcrowding in the profession, but pointed out that there was another side to the picture. "If we love our profession," he said, "our hard work becomes a pleasure. The pain and suffering we daily witness lose much of their sting as we have the glorious consciousness of having relieved them. Can we not count on the respect and esteem of our neighbours and the unsolicited blessings of the poor?"

INFLAMMATION OF THE SPHENOIDAL SINUS.

IN the October number of the *Archives Générales de Médecine* Dr. Toubert of the military hospital of Val-de-Grâce, Paris, publishes a very long paper on the intracranial complications following disease of the sphenoidal sinus, giving full details of two cases which have come under his personal observation, together with a summary of 22 others collected from various sources. The most usual age for this disease is from 20 to 45 years, and the exciting cause is infection, sometimes by the bacillus of influenza, but principally by the pneumococcus or diplococcus of pneumonia, and by the staphylococcus and the streptococcus, which occur both in the pus of the sinus and in that of the meninges, the organisms having made their way to the sphenoidal sinus from the nose, the pharynx, or another sinus. Infection may take place directly in connexion with a general disease such as pneumonia or erysipelas, or indirectly (1) after febrile diseases, such as typhoid fever, and especially influenza which holds the first place in the list of exciting causes, or (2) after chronic diseases, such as syphilis, which tend to produce necrosis of bone. Dr. Toubert's first patient suffered from influenza, and it was through this disease that an entrance was provided for the streptococcus which set up the inflammation of the sphenoidal sinus and the subsequent meningitis. No adequate information has been collected with respect to the absolute frequency of disease of the osseous sinuses in general; many of these conditions are unrecognised during life and only discovered at necropsies. The sphenoidal sinus is, however, less liable to disease than the maxillary sinus. Diseases of the ear as a cause of intracranial complications have been carefully studied, but less has been done with regard to the perinasal cavities; there is, however, evidence that suppuration of the sphenoid bone and of its sinus is an important cause of meningitis. Pus may be formed both on the surface of the mucous lining of the sinus and also between the mucous lining and the bone, so that the mucous membrane is converted into a bag of pus floating in pus and secondary osteo-periostitis of the osseous walls is relatively frequent. Sometimes only the bone is affected (primary caries of the sphenoid), the mucous membrane being almost exempt; this often occurs in syphilis. The thinness of the bones, the special virulence of the infective agent, and the preceding necrosis of the mucous membrane are probably the chief conditions which favour osteitis. Perforation of the osseous walls of the sinus has been found in about two-fifths of the cases, not including antero-inferior perforations which do not lead to cerebral complications. The possible secondary lesions affecting the dura mater and the venous sinuses are abscess, either intradural or extradural, and phlebitis of the coronary or cavernous sinus. Abscesses are rare. Phlebitis may be considered to be the special intracranial lesion following inflammation of the sphenoidal sinus, just as intracranial abscess follows inflammation of the frontal sinus and meningitis follows ethmoiditis. Cerebral abscess proper seems never to have been found after suppuration of the frontal sinus. Weichselbaum has recorded the case of a robust young soldier who was carried off in two days by a febrile disease, accompanied by vertigo and vague pains in the face, forehead, and neck; the result of the necropsy was almost negative, but there was infection of all the sinuses of the face and the skull. Dr. Toubert therefore considers that these sinuses and the nasal fossæ should be examined in unexplained deaths following a short illness. In cases of meningitis it is usual to examine the osseous sinuses when their walls have been seen to be perforated, but the sphenoidal sinus is not always thought of, even though ocular or orbital symptoms during life may have drawn attention to the cavernous sinus of the dura mater or to the sensory or motor nerves of the eye. In Dr. Toubert's two cases the lesion of the sphenoidal sinus was discovered only at the necropsy, for there were no clinical symptoms pointing in that direction. In the first case that sinus was opened in the course of a search for the cause of a meningitis unattended by osteitis of the temporal bone. In conclusion, he gives a detailed account of Jacob's method of catheterising the sphenoidal sinus, a method which he prefers to that of Zuckerkandl.

INEBRIETY IN WOMEN.

A SPECIAL meeting of the council of the Charity Organisation Society was held on Oct. 29th at the Royal United Service Institution. The chairman was Dr. W. J. Collins who is chairman of the Inebriates Acts Committee of the London County Council. Mr. C. S. Loch suggested the following as subjects for discussion: 1. Is inebriety increasing amongst women? 2. What methods are to-day being adopted under the Habitual Drunkards Act and the Inebriates Acts? 3. Can any suggestions be made for dealing with cases of women in connexion with recent institutions, if possible, during the earlier stages of the disease? 4. Can such cases be dealt with apart from, or in connexion with, institutional treatment? The chairman pointed out that there should be greater coördination between the committing authority and the receiving authority. The task before them was to rehabilitate such women. It was said that inebriety was increasing amongst women but it was very difficult to arrive at the truth. In the discussions which followed the opinion was expressed that grocers' licences should be done away

with and that sooner or later a State reformatory would have to be established for bad cases. The question of grocers' licences and of other legislation was eventually referred to a committee of the council. Whatever be the cause, whether mental instability or the greater secrecy with which the vice is practised, we believe that it is a fact that a woman drunkard is harder to reform than is a man. The Inebriates Acts are at present almost a dead letter owing to the lack of accommodation provided for cases committed by magistrates and until such accommodation is provided either by the State or by municipal or private help it is difficult to know how these unfortunate creatures can be benefited. We are glad, however, to see that two such bodies as the London County Council and the Charity Organisation Society have the matter under consideration.

BIRMINGHAM CONSULTATIVE MEDICAL AND SURGICAL INSTITUTION.

THE report of the committee of the Consultative Medical and Surgical Institution, Birmingham, has been issued. "The income and expenditure account shows a deficiency of £343 13s. 6d. on the working of the institution to date, but the committee believe that before long this debit balance will disappear and the institution will become self-supporting." We quote from the *Birmingham Post*, where the committee are also credited with the view that they "consider it very satisfactory that these results should have been obtained in so short a time, notwithstanding the organised hostility of certain members of the medical profession." The committee would seem to be easily pleased, while if any member of the medical profession is interested to learn why the profession ought not to think well of the institution he is referred to THE LANCET of May 20th, 1899 (p. 1374), and June 2nd, 1900 (pp. 1595 and 1633).

ROYAL COLLEGE OF SURGEONS OF ENGLAND: ANNUAL MEETING OF FELLOWS AND MEMBERS.

ON Thursday, Nov. 15th, will be held the annual meeting of the Fellows and Members of the Royal College of Surgeons of England at 3 P.M., when the Council will present their annual report. At this meeting any Fellow or Member may bring forward any motions which may be accepted by the Council, but it is necessary that any proposed motions should be sent into the Secretary at once or it may be too late. The subjects mentioned in the report are numerous and interesting, but the items of most importance are undoubtedly the centenary of the College and the creation of the Honorary Fellowship. A full account of the proceedings is contained in the report, a copy of which is sent to every Fellow and also to every Member who applies for it. We hope that the meeting will be largely attended both by Fellows and Members and that some subjects of interest and importance to all the alumni of the College will be brought forward for discussion.

THE THANKSGIVING SERVICE AT ST. PAUL'S CATHEDRAL ON THE RETURN OF THE CITY IMPERIAL VOLUNTEERS.

THE thanksgiving service at St. Paul's Cathedral was a very impressive ceremony. Although it did not commence until nearly two hours after the appointed time the congregation was not entirely ignorant of the scenes which were passing in the streets. First, the news was whispered round that the procession had been broken by the crowd; then later it was feared that the Volunteers would probably not succeed in getting through at all and that very probably the service would not take place. From time to time the great west door was partially opened and a view was obtained of the upper windows of the houses and of the flags which hung across Ludgate-hill. At length flags and handkerchiefs were waved, the sounds of cheering, first distant, then nearer and louder, were heard, and at last the City Imperial Volunteers appeared. But even in the cathedral their procession was not continuous, and some stragglers appeared after the commencement of the service. The men looked very tired. There were many earnest, thoughtful faces and many eyes dimmed with tears. The address of welcome given by the Bishop of Stepney was straightforward, hearty, manly, and brief. The congregation joined heartily in the hymns and in singing the National Anthem. The *Te Deum* was sung to music by Professor Villiers Stanford. Those who were privileged to take part in the service are not likely to forget it, and only those who have attended on such an occasion at St. Paul's Cathedral can quite appreciate the beauty of an English service at its best.

THE Working Men's College, 46, Great Ormond-street, has for some months had an ambulance class in connexion with the college, but the class is at present without an instructor, as the gentleman who has hitherto been acting in that capacity has been compelled to relinquish the duties owing to ill-health. We have been requested to publish an appeal for a volunteer and we do so with pleasure. All the work is done in the evening and every effort will be made to fix a time to suit the convenience of the instructor. Communications should be addressed to the secretary, Mr. E. C. Duchesne, at the college.

ANNUAL congresses of Russian physicians and surgeons have been established at Moscow. The first meeting will be held on Dec. 28th, 29th, and 30th, 1900. The following officers have been elected for the organisation of the Congress:—President: Professor Diakonow. Vice-President: Professor Bobrow. Secretaries: Dr. Rein and Dr. Derewjinsky. Treasurer: Dr. Bereskin. Members of the Committee: Professor Sinitzin, Dr. Soloview, and Dr. Martinow.

THE Sanitary Inspectors' Association of South Wales and Monmouthshire met at Port Talbot on Oct. 27th. Mr. Edward Knox, J.P., C.C., the chairman of the Margam District Council, in an address to the members expressed the opinion that all medical officers of health should be debarred from private practice and that small districts should be combined under the supervision of one officer.

WE deeply regret to announce the sudden death on Saturday last of Mr. William Anderson, surgeon to St. Thomas's Hospital and professor of anatomy to the Royal Academy. An extended obituary notice will appear in our next issue.

DR. THOMAS BUZZARD has been selected as a representative of King's College on the Senate of the University of London, vice Lord Lister, resigned.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The concession granted by the Council for the Primary Fellowship for Licentiates of the College in recognition of the Royal visit to Ireland has been extended to July 31st, 1901, in the case of Licentiates of the College engaged in the present war or resident abroad.

DIPHTHERIA AT BAMPTON.—A largely attended meeting was held at the Public Rooms, Bampton, Devonshire, on Oct. 20th to impress upon the sanitary authority the necessity for taking immediate steps to stamp out the epidemic of diphtheria which has for some months past been in existence in the town. A large employer of labour stated that if the council would not move in the matter he would build houses for his men and their families in a spot where they would be sure of good sanitary arrangements.

THE OPENING OF THE NEW SCIENTIFIC LABORATORIES AT KING'S COLLEGE.

A LARGE gathering of eminent scientific men assembled in the great hall of King's College on the afternoon of Oct. 30th to welcome Lord Lister who was present to formally open the new scientific laboratories of the College.

The Rev. Dr. A. ROBERTSON (Principal of King's College) in opening the proceedings made a touching reference to the sad loss which the Queen had sustained by the death of Prince Christian Victor. In introducing Lord Lister, which he thought was a work of supererogation to an audience of scientific men, Dr. Robertson said that King's College was proud to remember, and would never forget, that the work which had made the name of Lord Lister to be hailed throughout the world as that of one of the greatest benefactors of mankind was associated with King's College Hospital.

Lord LISTER said that it might seem strange that so large a gathering of distinguished men should come to witness the opening of certain laboratories. Yet the occasion was not unworthy of celebration, for it marked an event of very great importance in the higher education of the metropolis. It was felt that mere lectures were not sufficient for introducing the student into branches of science and that practical instruction was imperatively necessary. In some branches King's College was long since well equipped to this end; the Wheatstone Museum contained as fine a collection of physical apparatus as existed and the physical laboratory was amply provided for. In chemistry nothing could be better than the arrangements for practical teaching, and the same might be said of other departments, but not of all till lately. The dissecting-room was by no means adequate, and the accommodation for the practical teaching of physiology was simply miserable, while there were defects in less degrees in other departments. The council had long been aware of these serious defects and had determined to remedy them. The laboratory for the practical teaching of physiology in all its branches was now second to none in the country. It had really been in operation for some time and under the direction of Professor W. D. Halliburton had attracted many students, not only from King's College but from elsewhere. Of late a large proportion of men preparing for the Fellowship of the Royal College of Surgeons of England had obtained their practical instruction in physiology at King's College. The removal of the physiological laboratory from the basement to the upper storey had afforded opportunity for the much-needed expansion of the anatomical department. At the same time the dissecting-room had been increased to almost double its original size. In addition there had been provided for, though not yet equipped, a fine anatomical museum. Lord Lister here referred to Professor A. W. Hughes who had returned from South Africa suffering from enteric fever and expressed the hope that he might soon be completely restored to health and have the satisfaction of seeing the completion of a department of which he was so bright an ornament. The bacteriological laboratory had received an important addition and it owed its inception to the enthusiasm and generosity of Professor E. M. Crookshank. Though it had attracted students not only of this country but of the world, it hitherto consisted of a single apartment which was not suitable for research work. A fine room had now been added and a class-room had also been constructed, common to the professors of bacteriology and physiology. Everybody had watched with interest the endeavours made to check the outbreak of plague in Glasgow, and while admiring the skill, science, and energy with which those measures had been carried out they rejoiced in the success which had apparently crowned those efforts. There had been a deep sense of relief in the metropolis also when it turned out under scientific examination that a suspected case of plague was not plague at all. The means of checking the plague in Glasgow and removing the scare of it from London had been entirely due to the kind of research which was carried out in a bacteriological laboratory. But it was by no means only the medical faculty that benefited by the new arrangements. Geology, architecture, and other departments of science and art had been adequately provided for. In short, it might now be said that King's College was abreast of the age in regard to her opportunities for scientific teaching in all departments. It was perhaps a happy coincidence that this great addition to the teaching power of King's College should have occurred at a time when she was entering upon a new career as one of the colleges of the reconstructed University of London. He himself would have greatly preferred that the old University should have been left to discharge its duties as an imperial examining body and that a separate teaching university should have been established. Other counsels prevailed and teaching and examining would exist side by side in the same institution. He greatly wished that the compromise might have all the success it was capable of and expressed the earnest hope that now the matter was decided all would make it their duty to work for the common good.

The LORD MAYOR of LONDON, one of the *ex-officio* governors of the college, asked for a vote of thanks to Lord Lister; and in seconding this motion the Hon. W. F. D. SMITH, M.P. (treasurer of the college), mentioned that the new buildings had been undertaken at the cost of £20,000. Of that sum there was still left a debt of £16,000, and he hoped that some patriotic man in London would be stimulated by Lord Lister's remarks and emulate other patriotic men in the provinces.

Lord LISTER then thanked those present for the vote of thanks which had been accorded to him and formally announced the new laboratories to be open.

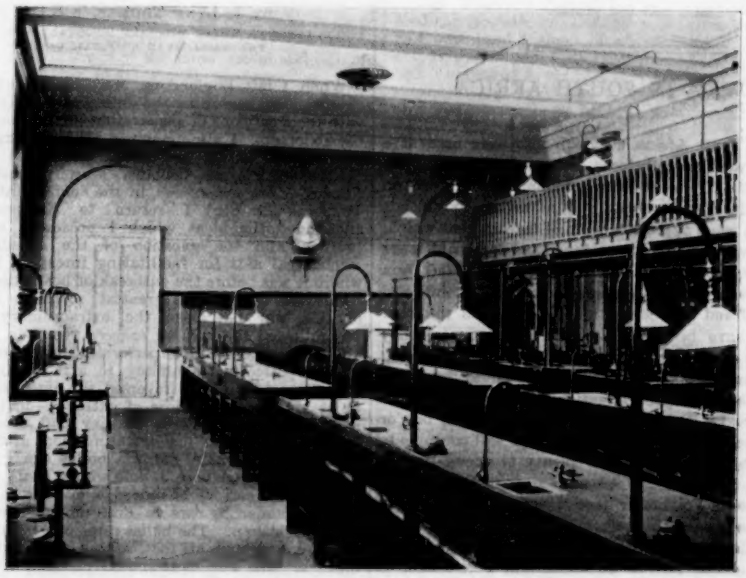
The company present then visited the new rooms, illustrations of two of which we reproduce.

The whole south wing of the college has been raised by an additional story, which includes the new geological, comparative anatomy, and botanical departments, while the second story of the north wing, comprising the physiological and bacteriological departments, has been largely reconstructed, as has also the very fine room on the first floor now allotted to the architectural department.

The first of our illustrations shows the general laboratory and class-room of the physiological department which is situated on the second floor, adjacent to the bacteriological department. Electric light, gas, and water are provided throughout. All the fittings are of the latest kind. New apparatus has been provided in many cases. The rooms devoted mainly to students' work are a lecture theatre, which is shared with the bacteriological department, and a spacious central laboratory. This will seat over 100 students; the work-tables are suited either for microscopic work or for practical work in chemical physiology. There are in addition 16 separate tables provided with shafting and all the necessary electrical apparatus for the study of experimental physiology, a branch of the science which is becoming every year of greater importance. In addition to this there are four rooms devoted to the exigencies of research: (1) a large room for investigations in chemical physiology; (2) a spacious and well-fitted room for experimental physiology; (3) a dark room for photographic and galvanometer work; and (4) a private work-room for the professor. The provision of a new physiological laboratory has rendered the old laboratory available for increased accommodation in the anatomical department. The dissecting-room has been nearly doubled in size, and all the accessory rooms necessary in a well-equipped anatomical department are now provided. The section of the college museum which relates to pathology will also be housed in part of the old physiological rooms in the basement, and a new and very handsome room, near the dissecting-room, has been built for the anatomical portion of the museum.

Our second illustration shows the research room and library of the bacteriological department. In this department is a very large class-room devoted to the technical education of post-graduate and other students from all parts of the world. Every student goes through the whole practical course with his own hands and is further assisted by lectures and practical demonstrations. A new feature is the bacteriological library of about 1000 volumes and pamphlets, lent by the professor for the use of the senior students. The library is of the greatest value in providing works of reference as well as the standard text-books ready at hand for those studying the subject or undertaking original research. A lecture theatre has also been built with the usual equipment, including an electric lantern and screen. The theatre, which is jointly for the use of the bacteriological and physiological departments, will accommodate about 200 students. The principal collections used in the teaching of geology, comparative anatomy, botany, and

FIG. 1.



The general laboratory and class-room in the physiological department.

FIG. 2.

Research room and library in the bacteriological department

materia medica, have been housed on the second floor in the north corridor, and there are well-arranged collections of specimens in all these departments.

In every direction evidence is shown of an earnest endeavour to provide for each individual student the means for practical work while the lighting and the general arrangements of details call for praise.

THE WAR IN SOUTH AFRICA.

THE events in South Africa, although they have been of a stirring kind, are nevertheless easily chronicled. The annexation of the Transvaal was proclaimed at Pretoria on Oct. 25th and with it came to an end, as far as its officials are concerned, a most oppressive form of Government which, if we may believe only half the evidence and facts which are alleged to have been brought to light, was animated by a selfish spirit of monopoly and aggrandisement, and maintained by a system of fraud and corruption. As regards the Boer forces, if they have been dispersed over the country they are nevertheless extremely active in prosecuting a harassing system of marauding and in making raids in various directions. The Rob Roy of the situation is the very able and ubiquitous leader De Wet, aided by Botha, and until one or both of these are captured the British troops will continue to be subjected to attacks and find plenty of occupation in repelling them.

The City Imperial Volunteers have returned to this country and have been accorded the welcome which they merited for their pluck, soldier-like qualities, and services in the field. Out of a total strength of 1729 of all ranks, nine were killed, 43 have died, 53 were wounded, and 141 were invalided—a total of 246 or slightly over 13 per cent. This was up to the date of their embarking from the Cape, but several deaths on the voyage home have unfortunately to be added to the number. Lord Roberts's address to the City Imperial Volunteers strikes us as not only one which any corps might be proud to have received, but as very happy in its allusions; "and," says his lordship, "there is one other thing you can do—that is, to carry into the heart of the nation what you now know of the British soldier, with whom you have fought shoulder to shoulder for some months past. Tell every one of his bravery, his endurance, his gentleness, and his good behaviour. Tell them what a noble fellow he is, and how, at a moment's notice, he is prepared to lay down his life for his Queen and country." It is well to be reminded of this "lest we forget." Our readers will recall the incident of the American soldier's remark to the gushing and effusive young lady: "Beg pardon, miss, I am not a hero. I am only a regular."

War and death spare none, and it was a sad coincidence that the news of the untimely death of Prince Christian Victor, a grandson of the Queen, should have reached this country at the time of the return of the City Imperial Volunteers, and have imparted a note of pathos to Her Majesty's gracious message to them.

As regards the question of the arrangements for the sick and wounded the management of the war hospitals and the efficiency of the medical service in the field we shall all feel glad when the Royal Commissioners have concluded their investigation and furnished their report. Meanwhile we may call attention to two articles which have appeared—one in the October number of the *Edinburgh Review* headed "The Sick and Wounded in South Africa"; the other in the first number of the *Monthly Review*, a new and important publication issued by the firm of John Murray, Albemarle-street, entitled "Surgical Experiences in South Africa," by Mr. A. A. Bowlby, F.R.C.S. Eng. Both of these articles are well worth reading at the present time. There has been a very lively passage of arms between Mr. Winston Churchill, M.P., and the Earl of Rosslyn in regard to certain allegations contained in a volume recently published by the latter. Mr. Winston Churchill gave a lecture on the war in South Africa on the evening of Oct. 30th, when Lord Wolseley occupied the chair and made a speech.

SIX MONTHS' EXPERIENCE IN THE SOUTH AFRICAN CAMPAIGN.

CAPE TOWN, APRIL; BLOEMFONTEIN, MAY; SPRINGFONTEIN, JUNE AND JULY; PRETORIA, AUGUST AND SEPTEMBER, 1900.

BY J. LYNN THOMAS, F.R.C.S. ENG.,

SENIOR SURGEON, WELSH MILITARY HOSPITAL; HONORARY SURGEON TO THE HAMADRYAD HOSPITAL, CARDIFF, ETC.

When I left England on March 3rd I entertained certain definite ideas regarding the duties of a surgeon in connexion with the treatment of penetrating and perforating wounds of the abdomen. I also imagined that the experience of this war would in all probability settle the respective and relative claims of bobbins, Murphy's buttons, Laplace's forceps, *et hoc genus omne*, in the field of intestinal surgery. To-day (Oct. 6th) I return to England having long abandoned the ideas which I possessed on my outward journey, and the question of the expediency of using mechanical aids for facilitating intestinal suturing is just where it was before the outbreak of hostilities.

Perhaps one of the greatest surprises in the surgery of this war has been the extraordinary success which has followed the *noli me tangere* principle of treatment of abdominal and thoracic perforating or penetrating wounds. It was perfectly astounding to find that the exit wounds of bullets which had traversed the intestinal cavity healed up as kindly as did those of entrance—in fact, the wounds healed up as quickly as if they had been inflicted by a modern surgeon in his operating-room after elaborate preparation of the skin. How a bullet can go through fæcal matter and then bore a hole which heals up without any septic complications is indeed a mystery to me. An officer who was under my care in Pretoria was shot near the spine in the right loin. The bullet came out in his perineum and then went through his foot, having traversed the rectum and urethra. The wounds in the body healed without trouble, as did that in the foot, the only serious annoyance being a few drops of healthy urine coming out from the perineum wound. I saw the wounds in the rectum, so that any hypothetical explanation is unnecessary. In one case where a bullet entered over the cæcum and came out behind the left trochanter major and gave rise to melæna and hæmaturia it was seriously suggested that they were due to bruising alone. Why some men think that a Mauser bullet does not perforate intestine in such cases of easy recovery I do not know. The conditions calling for cœliotomy in bullet-wounds (Lee-Metford and Mauser) must be very rare and the recognition of those conditions must be a matter of extreme difficulty.

LODGED BULLETS.

As a rule there should be no hurry in removing bullets which have traversed either the abdomen or the thorax, no matter how temptingly near the skin they may be. They should be left alone for two or three weeks—that is, until the bullet track is firmly healed and the extravasated blood is absorbed: two splendid media in which to grow pathogenic germs. After this period no serious harm is done should the operation wound become septic. I saw a case of hæmothorax converted into one of empyema by the removal of a bullet which was under the skin of the back. The *lacerated* entrance hole in front healed up by first intention, whilst the *incised* wound of the operation suppurated and nearly cost the patient his life.

Operation for hæmothorax is very rarely required. We had one case in which the heart was pushed to the right of the sternum and by careful nursing the patient got well rapidly. A bullet entered the mass of the pectoralis major and got lodged in the skin of the posterior fold of the axilla, giving rise to an enormous hæmatoma in the axilla. At the end of three weeks the bullet was easily removed, and should suppuration have set in there would have been no fear of extension beyond the wound. "Tommy's" desire to have his bullet "cut out" is almost morbid. I think there is a superstition in the army that bullets wander about in the body until some vital spot is reached and that on that account they should be "extracted." We generally had trouble with officers as well as with "Tommy" when advising them not to have an operation done in cases where the bullets were deeply imbedded and giving rise to no symptoms whatever, but most of them soon realised that metal in the body is not harmful if surgeons put common screws in broken bones in civil life without any hurt.

THE TELEPHONE-PROBE.

My wife having read an article by Mr. Frederick Treves on the telephone-probe sent one for our use. As I have not seen a medical journal since I left home I do not know what my former teacher and friend may have written about this instrument, but a few remarks may not be superfluous, as not one of the many surgeons whom I saw from Cape Town to Pretoria had had any experience of it.

The telephone-probe is one of the most useful and reliable instruments for locating metal *during* an operation. The position of Roentgen photography in the process of localisation of bullets and foreign bodies had been fairly well defined before this war, and any surgeon who has had much experience in operating knows from painful disappointment how easy it is just to miss the foreign body by one-sixteenth of an inch in situations where any small transverse cuts may involve the division of a nerve or a tendon. During an operation for a deeply imbedded bullet, retraction of the lips of the wound or the placing of the patient in a suitable position for operation—this being slightly different from that in which the Roentgen photograph was taken—often creates a disturbance of the straight line of known depth from the skin to the bullet. It is this disturbance of relationship which sometimes leads to failure in finding the bullet and is one of the causes of unnecessary and reckless exploration to extract the bullet at any cost. It is just in these conditions of difficulty that the telephone-probe comes to the rescue. The usefulness of Roentgen photographs terminates before starting an operation, whilst that of the telephone-probe comes in *during* the operation. Nélaton's probe, Fluhrer's probe, and other probes will surely become historical relics as soon as the telephone-probe gets generally known. The narration in brief of two cases will be sufficient to illustrate the particular points in which the telephone-probe becomes invaluable.

CASE 1.—Private ——, aged 22 years, was shot in the back on June 12th, 1900, at Klip Nek, the Mauser bullet grazing the left side of the third lumbar vertebra, perforating the stomach, and lodging immediately in front of it. The bullet gave rise to pain during deep breathing, with rigidity and tenderness of the mass of muscle between two of the tendinous intersections of the left rectus abdominis. On July 12th, under 1 per cent. of cocaine, I opened the anterior abdominal wall until something was felt which I mistook for the bullet. The patient could not stand the pain of further exploration, so he was anæsthetised and the wound was enlarged upwards. Again I thought I had the bullet, but ordinary traction on the forceps did not displace it. I then tried the blunt-pointed probe, and Professor A. W. Hughes was listening when I touched the quasi-bullet. There was no "ring" at the telephone, but on exploring more deeply through the inner edge of the wound the bullet rang the telephone, and it was easily removed. I had applied the bullet forceps first to the cartilage of the eighth rib and then more deeply to one of the ribs, and in this case the differentiation of cartilage, bone, and bullet was quickly made out. When I started operating I felt that the removal of the bullet was an easy matter. I should have abandoned further search for the bullet if my friend Professor Hughes had not reminded me of the gift which my wife had made to the hospital. This was the first occasion on which it was unpacked. After this incident the further exploration for bullets was simplicity itself and my colleague, Mr. Mills-Roberts, has also had some very interesting and instructive cases in which the probe was used.

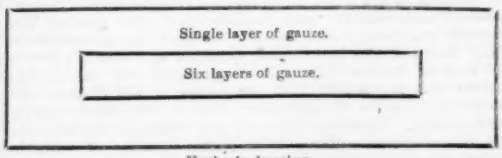
CASE 2.—On August 23rd, 1900, Trooper —— was shot near Belfast by a ricochet bullet through the back immediately below the spine of the left scapula. After the wound had healed skiagrams were taken and the bullet was located on the outer anterior aspect of the surgical neck of the humerus. It gave rise to much pain round the joint and upon movement of the shoulder. On Sept. 15th, under ether, I pushed the sharp-pointed probe through the skin and very soon, before incising the skin, I found the bullet. After making an incision to the surface of the deltoid I separated the fibres of the muscle until I exposed what felt like the bullet slipping under my finger before proceeding to incise the encapsulated (?) bullet. The probe was used, and to my surprise there was no "ring." On exploring the outer edge of the wound the telephone rang and the bullet was extracted. The feel of the bullet, encapsulated with a little fluid around it, was most difficult to differentiate by touch from that which I mistook in the first place to be the bullet but which turned out to be the tendon of the biceps. The probe in this case saved the opening up of the sheath of the tendon of the biceps—a procedure which might in time have entailed pain about the joint owing to adhesions forming upon avoidable traumatism.

FORCEPS-TOURNIQUET.

Last February I exhibited at a clinical meeting of the Medical Society of London a long-bladed forceps which had been used instead of an ordinary tourniquet in every amputation which I had performed for the last two years, and it appeared to me that it would be of service in military surgery. The conditions in South Africa requiring the use of a tourniquet have been so few, owing to the splendid success of conservative surgery in saving limbs, that I have had but few opportunities of testing it; but as the surgery of war is practically identical with the surgery of civil life, I think that the forceps-tourniquet would be found more handy and reliable than the elastic band or Esmarch's tourniquet. India-rubber deteriorates very quickly in climates like that of India and the one we have experienced in this campaign. To sterilise an Esmarch's tourniquet is not at all a simple and quick procedure under conditions which demand economy of antiseptics and time; it is necessary to have one assistant to apply an Esmarch's tourniquet in amputation at the hip or the upper third of the thigh; whilst every surgeon should in an emergency feel that he could perform single-handed any amputation with speed and confidence. The forceps-tourniquet has none of the disadvantages of the rubber band. It can be applied to control hæmorrhage during disarticulation at the hip or any amputation of the lower limb in 15 seconds, it is under the sole control of the operator, it can be slackened and re-clamped in a second, and, as far as my own observation goes, it does not give rise to the worrying vaso-motor paresis which follows upon the removal of the rubber band. At Springfontein I had the opportunity of demonstrating its use to Lieutenant-Colonel A. H. Keogh, R.A.M.C., and his staff in a case requiring amputation through the upper third of the thigh, and Lieutenant-Colonel Keogh and Mr. J. E. Ker (the latter of whom performed the operation) were pleased and surprised at the small amount of blood which was lost. For field hospitals and bearer companies I think the forceps-tourniquet would be found very handy on account of its portability and asepticity. A shield filled with an antiseptic jelly can be fitted over the smooth blade which is placed under the blood-vessels, and the instrument can be clamped on to the inside of the breast of the surgeon's tunic when on the trek. I hope soon to publish some cases with illustrations on the methods of applying the tourniquet in cases of amputations of the upper and lower limbs.

ONE MOP AND TWO PAIRS OF GLOVES FOR OPERATIONS.

It is important to economise mops, or sponges, and dressings as much as possible in order to reduce the quantity of packages for transport and at the same time to maintain efficiency. All our aseptic operations were performed without the use of any antiseptic lotion and a very small steriliser was all that we required for any operation. The thread gloves were taken out of the steriliser and worn by the operator and his assistant, and the one mop did not usually leave the hands of the assistant until the operation was completed. For example, we had a radical cure of hernia and excision of long portions of both internal saphenous veins and also removal of big bunches of varices from both legs performed at one sitting on a colonial soldier with only one mop, and the same also in amputation of the thigh, &c. The most economical and efficient dressing for operation wounds that I know of is what I should call a "Kocher's dressing," having seen it at Professor Kocher's clinic about three years ago. It is generally the only dressing which is applied in cases of nephropexy, ovariotomy, radical cure of hernia, trephining, &c. It answers admirably in civil practice and it was equally satisfactory at our stationary hospital. The diagram illustrates the points of this simple dressing:—



Kocher's dressing.

Six layers of gauze half an inch wide and of the same

length as the wound are placed over the line of sutures and are kept in place by a single layer of gauze extending about two inches in all directions and fixed by collodion. The advantages of Kocher's dressing are its simplicity, its cheapness, its compactness, and its non-interference with the sutures when taking it off for removing them.

The Army Regulation Case.

I would venture to suggest the reconstruction of the present army regulation case because it is lacking in portability and contains instruments which belong to the pre-anæsthetic era and which have long been discarded in civil practice. There are patterns of operating bags in civil practice which might with advantage be copied. Instruments carried in slots, &c., in solid metal trays are very well in a surgical instrument maker's shop, but when they get bent or twisted they become extremely unsatisfactory in use; trays made of one piece of hard wood are much more reliable. The ordinary probe gives more pain to the patient than is called for; it often infects wounds; and it is a question for serious consideration whether it should not be discarded from use except during the performance of an operation. It is a reminder of the surgical age when sinuses were treated by a single slap-dash incision and plugging of the gash made.

The Royal Army Medical Corps and the Civil Medical Officers.

I confess that my impression of the organisation of the Royal Army Medical Corps is much more favourable after being taught its practice and routine work by the most able and capable administrator of the Welsh Hospital, Lieutenant-Colonel A.H. Keogh, R.A.M.C., than it was. When this officer took over the charge of our hospital he said: "You will know as much about our organisation and the so-called mysteries of our specialised work in a month as I do." I confess that he over-estimated the capacity of his pupil for acquiring knowledge, but the manner in which the opinion was given and the desire to teach and explain the why and the wherefore of the many details of the work made our task a very instructive, interesting, and agreeable one.

I think it would be highly desirable for the authorities to confer a temporary rank upon all civil medical officers who hold no commission when their services are required to assist the Royal Army Medical Corps. From force of habit "Tommy" has got into the way of looking at shoulder-straps and not at the faces of individuals who enter the hospital. It is much easier to keep order in camp, to have orders promptly executed, and to have general smartness amongst convalescent patients when a civilian surgeon has stars on his shoulder-straps. Another advantage of a temporary rank would have been to prevent a few members of the Royal Army Medical Corps from treating the civil medical officers as if they did not belong to the same profession. I heard several men complain of being treated in that manner by officers of the Royal Army Medical Corps and discussing philosophically some means by which such conduct could be obviated in future. There should be no excuse for the principal medical officer of a hospital driving his civilian medical officers to mess separately, as they undoubtedly were in some hospitals. This was very fortunately not the custom in the majority of hospitals, and consequently the work was done most satisfactorily by a united and contented staff. On the whole, perhaps, it is the individual, and not the system, that is so much at fault. If that be so, the right way to improve the individual is to make the Royal Army Medical Corps more tempting to the best men by better pay and by compulsory and regular leave for study in organised schools for such work. Promotion should mean ability and not seniority alone.

Enteric Fever and Dysentery.

I do not know what the type of dysentery was in Bloemfontein, but judging from the sad and painful fact that three of the staff of the Welsh Hospital died from it—one at Bloemfontein and two at Springfontein soon after leaving the former place—and also bearing in mind the circumstance that they had the best nursing possible and also the advice of men of known ability and experience, one cannot but admit the probability that the germs of the disease had acquired a degree of malignancy which fortunately is quite exceptional. This took place in May when almost everyone in Bloemfontein suffered from gastro-enteritis of variable intensity due to the air being polluted by dust carrying germs from dried excreta and dead animals, &c.

An officer who was treated for enteric fever at Springfontein pointed out the way in which the water-supply of the troops of which he was in charge got contaminated and I think this worth relating. They had been encamped for some weeks about three-quarters of a mile below a railway-bridge and the water-supply was got from the river and was considered good because no houses, villages, or troops were near its banks for many miles up the river. All the trains coming down the line stopped on the bridge to get water for the engines, and it was discovered that hospital trains conveying enteric fever patients coming down the line always took advantage of the stopping on the bridge for clearing out the stools of those cases which happened to be in the train and also to clean the bed utensils. Owing to the formalities which the "regulations" required it took some weeks before the river contamination got stopped.

Bullet-wounds and their Sequelæ.

One of the peculiar results of Lee-Metford and Mauser bullet-wounds was the comparatively small skin scar and the relatively large size of the subcutaneous scar in the soft tissues. In one case a bullet entered through the cheek and came out through the lower part of the thorax posteriorly. The patient was well when I saw him, but he had paralysis of the inferior mental nerve and the hypoglossal and sympathetic nerves on the same side, and an enormous scar-cord could be felt from the angle of the jaw for about three inches. Whether the paralysis was due to direct lesion of the nerves by the passage of the bullet or whether the nerves got subsequently involved in the scar tissue, I do not know. The large subcutaneous scars are due to the devitalisation of the matrix holding the fluids of the body all round the track of the bullet. The velocity of the bullet causes hydro-dynamical displacement of fluid so acutely and suddenly that the shock impairs the vitality of the living matrix. An experiment on a fresh turnip shows well the devitalising, bruising, or pulping effect beyond the track of the bullet. By making a section at right angles to the track made by a bullet shot through a turnip and exposing the cut surface to the air, one can watch the changes of colour between the bruised and the unbruised parts. The extent of the pulping all around the track varies according to the succulence of the turnip. It is probable that many of the immediate results as well as the sequelæ of bullet-wounds are due either to this hydro-dynamical shock, or, later, to the nipping of important structures, such as nerves, in the scar of the devitalised tissues.

Aneurysms.

I should think that the safest course to adopt in treating aneurysms which develop two or three weeks after traumatism, is to lay open the blood-tumour, turn out the clots, and tie the ends of the vessels.

Case 3.—I saw an interesting case in consultation at No. 2 General Hospital, Pretoria, where two large pulsating tumours followed a wound made by a bullet passing through the opening in the adductor magnus for the passage of the femoral vessels. One tumour was on the inner side of the inner hamstrings, whilst the upper half of the popliteal space was occupied by the other tumour. It was not easy to differentiate the two tumours. An incision was made over the inside of the thigh, the blood-clot was turned out, and then the stretched opening in the adductor was enlarged sufficiently to turn out all the clots from the popliteal aneurysm, and the gaping mouths of the popliteal artery and vein were tied in the popliteal space, whilst on the inner surface of the adductor tendon—i.e, the lower portion of Hunter's canal—the other ends of the femoral artery and vein were tied. In this case the blood-vessels were injured where the femorals become popliteals, with the consequent yielding of the scar in the vessels on either side of the adductor opening. The patient was getting on well a week after the operation.

Case 4.—In consultation at No. 3 General Hospital, Springfontein, I saw another case of popliteal aneurysm following a perforating wound through the patella. The tumour extended for the whole length of the space and down into the calf. An incision was made over the ham, the blood-clots were turned out, and the artery and the vein were found to be divided and the two had to be ligatured at both ends. The patient made a good recovery.

Now in both Cases 3 and 4 the symptoms pointed only to what is called an aneurysm, and in both of the cases the veins were also found to be opened and communicating with the blood extravasated, although they did not show

any physical signs of the condition. It is much safer to treat these cases as if they were subcutaneous traumatic rupture of the blood-vessels. This, in fact, they are, the only difference being that the injured walls of the vessels give way some days or weeks after the original injury. I know of cases in which the artery was tied above by Hunter's operation—a much easier operation—but they were followed by gangrene. As long as the large blood-tumour is left it is a serious obstacle to the collateral circulation after proximal ligature of the main artery.

Injury to the Internal Saphenous and Great Sciatic Nerves, with Aneurysmal Varix in Hunter's Canal.

Case 5.—A newspaper correspondent was shot through the thigh on August 21st, 1900, near Belfast. When admitted to the hospital the entrance wound and the exit wound in the front and at the back of the middle of the thigh were healing kindly with no evidence of subcutaneous extravasation of blood. There was absolute anæsthesia over the distribution of the internal saphenous nerve with anæsthesia dolorosa over the middle two-thirds of the inner aspect of the leg. There was also anæsthesia, but not complete anæsthesia, over the distribution of the anterior tibial and musculo-cutaneous nerves, but there was no motor paralysis. The diagnosis arrived at was that the internal saphenous nerve had been divided in Hunter's canal, and that the outer edge of the great sciatic nerve—or, if it had already divided, the external popliteal nerve—was in a state of paresis due to the hydro-dynamical shock which I have already referred to. We were all surprised that the blood-vessels had escaped, considering the nerve lesions and the position of the wound. On Sept. 4th—i.e., a fortnight after the accident—an aneurysmal varix formed in Hunter's canal, and on the 8th I tied the femoral artery immediately above the original injury by separating the fibres of the sartorius muscle instead of displacing it, which requires a longer incision. Recovery was uneventful. The fact that a bullet can pass antero-posteriorly between the superficial femoral artery and the vein and divide its accompanying nerve without giving rise to immediate dangerous hæmorrhage is almost on a par with the surprising fact that perforations of the intestine will close without the aid of a surgeon.

Explosive or Expanding Bullets.

I saw but few cases of wounds which had been caused by explosive or expanding bullets. In all of the cases the bone had been shattered, and the few cases which suppurated, as well as the veldt sores, were treated by the application of pure tincture of iodine.

I had the opportunity on arriving in Pretoria of examining the carriage of the American Consul-General, Colonel Stowe, which had been riddled by Mauser bullets south of Kroonstad, and as our train was the next to go to Pretoria with passengers after the line was repaired we naturally took a lively interest in the character of the bullet-holes in the carriage. There was one bullet-hole above the ventilator of one of the windows which before a full examination I took to be due to the effect of an explosive bullet. Between the inner and outer wall of the ventilator there was a space of about two inches. The outside had one clean-punched hole which was the hole of entrance, whilst on the inside wall there were six jagged perforations covering an area of six inches by three inches. The bullet in traversing the interspace between the inner wall and the outer wall struck a thin piece of cast iron and was broken into six fragments, and it left behind in the space a piece of the outer covering. Everyone who saw the condition felt that it was undoubtedly an example of the effect of an explosive bullet. Through the courtesy and kindness of Colonel Stowe and Major Gordon, Railway Staff Officer, I was allowed thoroughly to examine the carriage and to make plain the use of what most of us had considered to be a bullet which is not permitted in civilised warfare.

The Protection of the Heart in Battle.

Some members of our profession have for years advocated the wearing of a steel breastplate for the protection of the heart in battle, but I am afraid that the experience gained in this war with small-bore rifles is likely to damp their ardour in advocating the use of such a protective appliance. A man is as likely to be shot through the heart by a bullet entering at the shoulder, the side, the back, the loin, or even the head, as he is to be killed by a bullet entering in front of his chest. In fact, from all accounts I think that in this war the left breast was the least likely spot to reach the Boer's heart by a bullet on account of his assuming the prone position behind cover or protecting his chest in a trench. A man of Brabant's Horse had a narrow escape of being shot through his heart *viâ* his right ilium. He had just eaten a whole Maconochie ration and had started up the side of a kopje immediately afterwards. Some Boers had managed to get round the hill and were hiding in a mealie-field; they fired and the bullet entered the trooper's body at about two inches below the crest of the right ilium and came out immediately below the costal margin of the left eighth rib, probably having traversed his full stomach.

Conclusion.

In conclusion, I again wish to emphasise the opinion that the *vis medicatrix naturæ* of the old school will be found in a more prominent and exalted place amongst the methods and means of treatment in penetrating gunshot wounds of the abdomen than it has been since the birth of the new operative school a few years ago.

On board Royal Mail Steamer *Saxon*, Oct. 17th.

NOTES FROM SOUTH AFRICA.

(From our Travelling Correspondent.)

My last letter was written *en route* between Norval's Pont (Orange river) and Kroonstad. At Kroonstad I have been obliged to stop for a day, but I hope to leave for Pretoria to-morrow and thence to take a run down to Durban.

The small stations on the line between Bloemfontein and Kroonstad—Glen, Karee siding, Vet river, Smaldeel, and Ventersburg road—have each a civil medical officer in charge, with a small marquee hospital of from 10 to 30 beds. Here trivial cases are treated till the men are fit for duty, while serious cases, which are very few and far between, are sent down the line in ambulance trains to Bloemfontein. Winburg, some 20 miles from Smaldeel, with which it communicates by rail, has a large stationary hospital of 150 beds in town buildings. This hospital, under Major Hamilton, R.A.M.C., has had a busy time, as it has been the medical centre of a large tract of country—the Ficksburg, Bethlehem, and Senekal districts—which was for several weeks the scene of constant fighting with small marauding bands of the enemy.

The whole country between Bloemfontein and Kroonstad is inexpressibly dreary—wide stretches of sandy veldt sparsely dotted with kopjes and to all appearance unpopulated. September is the windy month in South Africa and our journey up was made in the teeth of violent sandstorms. The hot weather is now setting in, and the flies constitute a veritable plague. It is difficult to exaggerate the potentiality of these pests to spread infectious diseases, and all medical observers of the typhoid fever epidemic in Bloemfontein last spring are agreed in believing that flies were an important agency in spreading the disease. Mosquitoes are common enough in houses, but they are practically unknown in camps. I have caught several specimens, but have not yet seen the anopheles claviger or malaria-bearing variety.

Kroonstad is a miserable little town of tin-roofed houses straggling from the eastern side of the railway station to the Valsch river. Streets alternate with waste plots given over to Kaffirs, empty tins, and general rubbish. Close to the station is the tiny hotel, now converted into a neat little hospital for officers, of whom there were four, who were convalescents, waiting there for a hospital train at my visit. Near the hotel is the church, a tin-roofed building with a wooden floor. Both these buildings were used for the temporary reception of sick soldiers when Kroonstad was first occupied and both were the subject of unfavourable comment by Mr. W. Burdett-Coutts who appeared to think that beds should have been sent into the town for the reception of patients before our forces occupied it.

In marked contrast to the sordid, dreary little town are the camps on the western side of the station—No. 3 General Hospital, the Scottish Hospital, and the convalescent camp attached to No. 3 General Hospital. All these are close together and occupy an excellent site on a gentle eminence sloping down to the line. No. 3 General Hospital is a typical example of the best class of marquee hospital. The lines are laid out with marvellous accuracy, the interiors of the marquees are neat and cheerful, and the patients appeared to have every

comfort, including large double recreation and dining tents for convalescents. A grim reminder of war is the bomb-proof shelter between the hospital and the line, and it is not so long since that convalescent patients had to man the trenches in view of an expected attack by the notorious De Wet. Near to No. 3 General Hospital, but separated from it by the convalescent camp, is the Scottish Hospital, which consists of 20 tortoise tents which accommodate 200 patients, with several wooden huts used as administrative buildings. The general plan of the hospital is lacking in the symmetry and severe simplicity conspicuous in purely military hospitals, but the wards are cheerful and neatly kept, and nothing that human ingenuity could devise for the actual care and comfort of the sick has been forgotten. The services of the surgeons of this hospital have been requisitioned for an unusually large proportion of serious surgical cases, and they have been markedly successful in cases of intestinal suture and resection. I understand that this hospital has just been handed over to the Government, and I only hope that the services of some at least of its brilliant staff have been retained. Both of these hospitals have many vacant beds; in fact, the hospital arrangements all through South Africa—calculated as they are for a fighting army in an unhealthy country—are on far too lavish a scale for present circumstances, and the medical officers and the nurses everywhere report a lack of work.

Kroonstad, Sept. 22th.

WATER-SUPPLY IN SOUTH AFRICAN TOWNS.

(FROM A CORRESPONDENT.)

THE following notes, which we have received from a correspondent well situated for knowing what he is writing about, show that the question of water-supply in South Africa is still in its infancy and that drainage schemes as yet hardly exist.

CAPE COLONY.

Cape Town possesses a gravitation supply under the control of the corporation. There are two large reservoirs on Table Mountain to collect the rain, of which there are as much as 100 inches in the year. The neighbourhood of the reservoirs is jealously guarded and is free from all possibility of human contamination. This town is the only one in South Africa which is thoroughly drained.

Among the suburbs we have Wynberg, which also gets its supply from Table Mountain. Here there are two reservoirs and the authorities are considering the question of drainage. At Rondebosch and Claremont there is a spring water-supply, but it is not sufficient for the rapidly-increasing number of residents, and is recognised as being imperfect, so that a new scheme is under consideration, but there is as yet no drainage. At Kalk Bay there is a gravitation supply from reservoirs, without drainage. At Simonstown there is a water-supply from the mountain for naval and military purposes and in the town there is a storage reservoir from surface springs, but no drainage. At Burgersdorp there is a gravitation supply from springs five miles away across undulating country, while at Somerset East there is again a gravitation supply in addition to an irrigation supply, because water is collected in a catchment area in the hills and allowed to run down to the town in irrigation channels. At Caledon there is a gravitation supply, with a reservoir and a catchment area on the hill, all very good in spite of the absence of drainage. At Port Elizabeth, a town which has the distinction of being already half-drained, there is a gravitation and pumping supply of water from a catchment area situated in the hills 18 miles away from the town. Here there is a filter-bed from which the water flows in covered pipes to one of the most enterprising towns in South Africa. At East London there is a similar excellent water-supply but no attempt at drainage.

ORANGE RIVER COLONY.

The only town in this colony boasting of a water-supply is the well-known capital, Bloemfontein, where there is a pumping supply from the Modder river, 22 miles away, where the water is filtered and then pumped into the town. Now the Orange Free Staters were driven unwillingly to the expense of new waterworks because the town suffered so much every year from enteric fever. The town takes its name from Bloomfountain, a spring in the centre of the town, which though once considered to be perfect has of late years become more and more contaminated by the filthy habits of the people, by neighbouring cesspools, and by the complete absence of all drainage.

When the British so unfortunately allowed the Boers to repossess themselves of the Bloemfontein waterworks it was from the condemned springs in the middle of the town that our army was obliged to draw its drinking water. It will be remembered that the British entered Bloemfontein on March 13th, bringing with them numbers of young soldiers who were already harbouring the seeds of enteric fever contracted from the polluted water of Paardeberg and other camps. The troops were still fatigued after Cronje's surrender on Feb. 27th and the ensuing forced marches, and the bridges behind the advancing army had been destroyed by the enemy, so that it was impossible to get up a sufficiency of food, much less Berkefeld or Pasteur filters. Moreover, in the complete absence of fuel and with stringent orders not to interfere with the residents, it was impossible to boil the men's drinking water. Added to all this there came unfortunately at this time some heavy rain which must have washed much surface-dust and many typhoid bacilli into the drinking wells. To complete the picture, it must be remembered that the army had not had time to erect latrines and that the rain showers had every opportunity of washing the bacilli into the wells where everything necessary existed for the production of artificial cultures.

Assuming that these various causes aided, with others, in producing the typhoid fever epidemic the concentration of the poison at Bloemfontein was to be expected about the end of March, and allowing for two weeks' incubation and three or four weeks' illness the death-rate from disease in South Africa would presumably mount up about the middle of May. As a matter of fact, the death-rate from disease reached the high figure of 206 in the week ending April 28th and rose to 311 in the week ending May 19th, while it reached its maximum of 369 in the following week. I have gone into some detail on this point because it has always seemed to me that the chief defence of the Royal Army Medical Corps with regard to the typhoid fever epidemic at Bloemfontein might be the carelessness of the authorities who permitted the Boers to take possession of the only waterworks in the Orange Free State.

Is it too much to hope that some day a general officer while invading the enemy's territory will inform himself of the water-supply of any town which he is attacking and safeguard it at all costs? During the present war this would have been extremely easy, for the headquarters staff could have obtained all information from one or both of the two water engineers who have constructed most of the waterworks mentioned in this article.

THE TRANSVAAL.

Johannesburg possesses a water-supply which comes from a farm 22 miles outside the town, shafts being sunk 18 feet into the dolomite limestone rock, and the daily yield is 1,000,000 gallons. This belongs to a private company. Johannesburg has no drainage yet, the daily removal-bucket system being in full force, worked by Kaffir coolies who are obliged to live in a special part of the town. The Johannesburg waterworks have more than once been nearly captured by the Boers since our occupation of the town.

Pretoria, although the capital, is a much smaller and less important town, and possesses a very excellent water-supply, though it is wholly dependent for drainage on buckets and Kaffirs. The water comes from a spring situated in a picturesque ravine between two of the hills commanding the town, upon the summits of which are built the empty forts which were supposed to defend the capital. There seems no possibility of pollution, for there is only one farmhouse near by and both the intake and the pipes to the town are well protected. Chemical and bacteriological analysis were very favourable in August, when examined by Dr. G. Turner, the medical officer of health of Cape Town, who has now been lent to the Transvaal. Moreover, the quantity of water is quite enough for 50,000 people and therefore it is ample for the 15,000 inhabitants of Pretoria.

Cape Town, September, 1900.

ASYLUM REPORTS.

Dorset County Asylum (Annual Report for 1899).—The average number of patients resident in the institution during the year amounted to 718 and comprised 349 males and 369 females. 115 patients were admitted during the year—viz., 54 males and 61 females. Of the 115 patients 96—viz., 48 males and 48 females—were first admissions, the remaining 19 being re-admissions. Dr. P. W. Macdonald, the medical superintendent, states in his report regarding the character of the admissions that there have been fewer cases of a melancholic type, but that those suffering from grave and organic forms of mental disease would seem to be on the increase. "Among the female admissions were numerous instances of an inexplicable mental breakdown after middle life and where at the time of the attack home comforts were not wanting. In these cases there is strong circumstantial evidence that long-continued years of hard work under unfavourable and trying conditions had much to do with the subsequent illness." Cases of genuine epilepsy have been fewer among the admissions, and this is attributable to the increased efforts, mainly of a private and philanthropic nature, to treat and deal with epileptics in special homes. Of the juvenile admissions it is stated that in addition to the idiotic and epileptic there were also present general paralytics. "This dreaded and typical form of degenerative changes in the nervous system is, I regret to say, on the increase in this district." Almost 50 per cent. of the total admissions fell within the two decades of life from 20 to 30 years and from 40 to 50 years. Special interest is attached to the fact of this large proportion of cases drawn from the periods covering early manhood and the prime of life. "In the one case it reveals the strain on the mental faculties incidental to the start in life, and in the other the too oft-told tale of a breakdown after a prolonged struggle in the field of competition." An analysis of the ascertained causes of insanity among the patients admitted during the year gave the very large percentage of 37 as due to hereditary predisposition. "Each year brings fresh facts and further proofs of the widespread influence of heredity as a predisposing cause among the patients in this district." Mental anxiety and worry account for about 10 per cent. of the admissions and senile brain decay accounts for a similar proportion. In a large number of cases the actual attack was often brought on by a prolonged combination of causes. During the year 39 cases—viz., 18 males and 21 females—were discharged as recovered, or 5·4 per cent. of the average number resident. The deaths during the year amounted to 41 cases—viz., 25 males and 16 females, or 5·7 per cent. of the average number resident. Among the deaths two were due to cardiac disease, three to chronic or acute renal disease, three to general paralysis, four to bronchitis, four to tuberculosis, pulmonary or general, five to senile decay, and six to dysenteric and allied conditions. Regarding the unusual proportion of deaths from the intestinal conditions referred to, it is pointed out that these deaths occurred at a time when the asylum was overcrowded, and rightly or wrongly this was looked upon as the most probable cause of intestinal complaints ranking so high. "In the annual report of the Commissioners in Lunacy for 1898-99 every asylum in which ulcerative diarrhœa, or so-called colitis or dysentery, had appeared has been bracketed insanitary." After a careful test of the drains of the asylum no defect, however, is said to have been found so that the cause of the prevalence of this disease remains unaccounted for. The proportion of tuberculous cases ending in death is regarded as small and is attributed to the good situation and the open air. Bovine tuberculosis is also said to be comparatively rare in the south-west of England. The applications for the admission of private patients are greatly on the increase, and "it is much to be desired that no great delay will take place in providing separate accommodation for private patients." Electric light is now used in the building and the entire plant has continued to give satisfaction, the cost for the year ending March, 1900, being 1¼*d.* per unit. The Lunacy Commissioners' report is not appended.

Down District Asylum, Downpatrick (Annual Report for 1899).—The average population of the asylum during the year was 567 and consisted of 297 males and 270 females. The admissions throughout the year numbered 128—viz., 67 males and 61 females. Mr. M. J. Nolan, the medical superintendent, states in his report that the admissions for the year were only two in excess of the number admitted in 1898. Of the admissions 19 presented no prospect of amelioration. As noted in the reports of previous years many of those admitted were advanced in years and broken down in health. "Such cases," adds Mr. Nolan, "are most unfavourable and cause much anxiety, as they require very special care in the hospital departments which, though accommodating over 100 patients, are barely able to meet the demands made upon them by the yearly increasing increment of senile and practically incurable cases." A history of heredity was ascertained in 34 per cent. and of alcoholism in 8 per cent. of those admitted. "The most remarkable feature of the admissions was the great frequency of heart disease with mental disorders, no less than 34 of the 128 cases admitted showing this association, and of those 34 18 were upwards of 60 years of age." During the year 60 patients were discharged as recovered, or 10 per cent. of the average number resident. A considerable number of those discharged as recovered were, in the first instance, handed over when convalescent to the care of their friends, and on the expiration of a probationary term of six weeks their names were finally removed from the asylum books. The deaths during the year amounted to 47—viz., 31 males and 16 females, or 8·3 per cent. of the average number in residence. Of the deaths four were due to apoplexy and paralysis, five to general paralysis, five to epilepsy, five to dysentery and diarrhœa, 10 to pulmonary phthisis, and 12 to cardiac disease. In no case was death due to suicide or misadventure. Mr. Nolan points out the value and importance of pathological investigation and urges that some coöperative scheme should be set on foot by the united Irish asylums to promote such research. Precautions are taken to guard against the contamination or spread of tuberculosis. Cattle on the farm discovered to be diseased were destroyed and the animals in which the tuberculin test gave rise to a suspicious reaction were isolated. "The milk-supply was recently specially analysed and found to be free from taint, so that the process of sterilisation is no longer necessary. The other prophylactic precautions reported last year have been continued and have been extended as far as possible." Dysentery and colitis still continue to make their appearance from time to time, though no local, hygienic, or dietetic cause can be found to account for its presence. "It is worthy of note that some of those who were attacked by the disorder had already suffered from one or more attacks of it in their own homes." The necessity for new buildings to accommodate the increasing number of patients is being steadily felt. Mr. Nolan points out that the future development of building should not take the form of large featureless detention-wards, but that small, properly-equipped, classified, and self-contained blocks should take their place, and that the older portions of the existing building could be set aside for the accommodation of the chronic class. The farm department has been worked with benefit and with profit.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In 33 of the largest English towns 6139 births and 3860 deaths were registered during the week ending Oct. 27th. The annual rate of mortality in these towns, which had been 17·1 per 1000 in each of the two preceding weeks, rose to 17·3 last week. In London the death-rate was 15·9 per 1000, while it averaged 19·2 in the 32 provincial towns. The lowest death-rates in these towns were 11·8 in Cardiff, 12·2 in Plymouth, 12·9 in Bradford, and 13·2 in Norwich; the highest rates were 20·8 in Swansea, 21·9 in Liverpool, 23·7 in Manchester, and 29·0 in Salford. The 3860 deaths in these towns included 485 which were referred to the principal zymotic diseases, against numbers decreasing from 776 to 468 in the four preceding weeks; of these, 181 resulted from diarrhœa, 97 from diphtheria, 78 from "fever" (principally enteric), 45 from measles, 45 from whooping-cough, and 39 from scarlet fever. No death from any of these diseases occurred last week in Plymouth; in the other towns they caused the lowest death-rates in Norwich, Birkenhead, Halifax, and Newcastle; and the highest rates in Swansea, Wolverhampton, Salford, and Blackburn. The greatest

mortality from measles occurred in Swansea; from scarlet fever in Burnley and Blackburn; from "fever" in Wolverhampton, Hull, and Gateshead; and from diarrhœa in Blackburn, Preston and Sunderland. The mortality from whooping-cough showed no marked excess in any of the 33 towns. The 97 deaths from diphtheria included 39 in London, eight in West Ham, six in Sheffield, five in Portsmouth, five in Bristol, and five in Blackburn. No fatal case of small-pox was registered last week in any of the 33 towns; and only one small-pox patient was under treatment in the Metropolitan Asylums hospitals on Saturday last, Oct. 27th. The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of the week was 2489, against numbers increasing from 1703 to 2342 on the eight preceding Saturdays; 320 new cases were admitted during the week, against 313, 322, and 328 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 164, 173, and 182 in the three preceding weeks, further rose last week to 237, but were 102 below the corrected average. The causes of 50, or 1·3 per cent., of the deaths in the 33 towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Nottingham, Bradford, Leeds, Newcastle, and in nine other smaller towns; the largest proportions of uncertified deaths were registered in Birmingham, Leicester, Preston, Sheffield, and Sunderland.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had declined from 19·3 to 17·5 per 1000 in the three preceding weeks, rose again to 19·6 during the week ending Oct. 27th, and showed an excess of 2·3 per 1000 over the mean rate during the same period in the 33 large English towns. The rates in the eight Scotch towns ranged from 14·6 in Leith and 15·5 in Greenock to 21·9 in Paisley and 23·0 in Dundee. The 607 deaths in these towns included 25 which were referred to diarrhœa, 18 to whooping-cough, eight to scarlet fever, six to diphtheria, four to measles, four to "fever," and two to small-pox. In all, 67 deaths resulted from these principal zymotic diseases, equal to an annual rate of 2·2 per 1000, which corresponded with the mean death-rate last week from the same diseases in the 33 large English towns. The fatal cases of diarrhœa, which had been 53, 36, and 30 in the three preceding weeks, further declined last week to 25, of which 14 were registered in Glasgow, five in Aberdeen, and four in Dundee. The deaths from whooping-cough, which had been 13 and 14 in the two preceding weeks, further rose to 18 last week, and included 12 in Glasgow, three in Dundee, and two in Greenock. The fatal cases of scarlet fever, which had been seven and five in the two preceding weeks, rose again last week to eight, of which six occurred in Glasgow. The deaths from diphtheria, which had increased from five to eight in the three preceding weeks, declined again to six last week, and included two in Edinburgh and two in Paisley. The fatal cases of measles which had declined from 10 to two in the three preceding weeks, rose again last week to four, of which two were recorded in Edinburgh. The deaths referred to different forms of "fever," which had been 13, five, and six in the three preceding weeks, declined again last week to four, of which three occurred in Glasgow, where the two fatal cases of small-pox were also registered. The deaths referred to diseases of the respiratory organs in these towns, which had been 98, 104, and 117 in the three preceding weeks, further rose last week to 139, and were 31 above the number in the corresponding period of last year. The causes of 25, or more than 4 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 26·4 and 24·9 per 1000 in the two preceding weeks, further declined to 20·0 during the week ending Oct. 27th. During the past four weeks the death-rate in the city has averaged 24·3 per 1000, the rate during the same period being 15·6 in London and 15·9 in Edinburgh. The 134 deaths belonging to Dublin registered during the week under notice were 33 less than the number in the preceding week, and included 12 which were referred to the principal zymotic diseases, against 36, 21 and 19 in the three preceding weeks; of these, six resulted from diarrhœa, four from "fever," and two from whooping-cough. These 12 deaths were equal to an annual rate of 1·8 per 1000, the zymotic death-rate during the same period being 1·7 in London and 1·2 in Edinburgh. The fatal cases of diarrhœa, which had been 27, 15, and nine in the three preceding weeks, further declined to six last week. The deaths referred to "fever," which had been three, four, and five in the three preceding weeks, declined again last week to four. The two fatal cases of whooping-cough corresponded with the number in the preceding week. The 134 deaths in Dublin last week included 34 of infants under one year of age and 19 of persons aged upwards of 60 years; the deaths of infants were slightly below the number in the preceding week, while those of elderly persons showed a very marked decline. Four inquest cases and three deaths from violence were registered, and 40, or nearly one-third, of the deaths occurred in public institutions. The causes of 10, or more than 7 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

ROYAL NAVY MEDICAL SERVICE.

THE following appointments are notified:—Staff Surgeon J. Sugrue to the *Vernon*. Fleet Surgeons: L. H. Kellett to the *Renown* and H. J. Mc. Todd to the *Blake*. Surgeons: R. Hill and G. E. Duncan to the *Renown*; C. G. Matthew to the *Blake*; E. F Mortimer to the *Canopus*; H. J. Chater to the *Sparrow*; H. R. H. Denny to the *Magnificent*; G. A. S. Bell to the *Blanche*; H. P. Turnbull to the *Duke of Wellington*; and T. S. Hartley to the *Condor*.

ROYAL ARMY MEDICAL CORPS.

Major Strong has been granted six months' leave to England on medical certificate. Forty non-commissioned officers and men will proceed from Aldershot on Nov. 6th to Southampton and embark on the transport *Dunera* for South Africa.

ARMY MEDICAL RESERVE OF OFFICERS.

Surgeon-Captain James Mackay to be Surgeon-Major.

VOLUNTEER CORPS.

Artillery: Surgeon-Major J. Shaw Carleton, 1st Gloucestershire Volunteer Artillery, is promoted to Surgeon-Lieutenant-Colonel.

TRANSVAAL WAR NOTES.

The *Kinfauns Castle*, which arrived at Southampton on Oct. 27th, had on board Lord Justice Romer, Sir David Richmond, Dr. W. S. Church, and Professor Cunningham, of the South African Hospitals Commission.

Lieutenant-Colonel Irvine, R.A.M.C., has arrived home on board the *Britannic*.

Mr. R. H. Mills-Roberts, F.R.C.S. Eng., who was welcomed home from South Africa on Oct. 24th, at Llanberis, was met at the station by a crowd of 5000 quarrymen bearing torches. In returning thanks for the welcome he said that when Lord Roberts inspected the hospitals at Pretoria he spoke very highly of the Welsh Hospital.

The following officers of the Royal Army Medical Corps have been discharged from hospital to duty:—Captain W. E. Hardy, Captain F. McDowell, and Lieutenant H. Simpson.

SOURCES OF WATER-SUPPLY IN SOUTH AFRICA.

We would direct our readers' attention to the information contained in a very excellent and instructive article bearing upon this subject which we have received from a correspondent and which is published in another column. It is strongly corroborative of the view which we have put forward from the first concerning the epidemic of enteric fever among our troops serving in South Africa and especially as regards the sudden and very severe outbreak of that fever which followed the capture of Cronje's camp at Paardeberg and the forced marches resulting in the subsequent capture and occupation of Bloemfontein. Briefly stated, the article tells us that the capital of the Orange River Colony had a medical history of recurring outbreaks of enteric fever, and this led to the construction of the present waterworks. When the Boers got possession of the waterworks the British troops were driven to obtain their water-supply from the condemned springs in the middle of the

town of Bloemfontein. What was begun at Paardeberg was augmented and completed at Bloemfontein, and a big epidemic of enteric fever among our troops, fatigued and exhausted by their previous hard services, was the result.

THE HEALTH OF PROFESSOR A. W. HUGHES.

Professor A. W. Hughes of King's College reached Southampton from South Africa on Oct. 19th. Though suffering from enteric fever he was safely brought to London and placed under the care of his colleague, Dr. Nestor Tirard. During the past week his condition has caused great anxiety owing to certain conditions which have complicated the course of the fever. These conditions—viz., engorgement at the base of the right lung and phlebitis—have occasioned great weakness of the circulation; at the present moment, however, we are informed that though Professor Hughes is still extremely weak there is good hope of his recovery, the immediate urgency of the symptoms having passed.

ARMY MEDICAL SCHOOL, NETLEY.

The following is a list of the surgeons-on-probation for the Royal Army Medical Corps who have been nominated by the Secretary of State for War on the recommendation of the medical schools of the United Kingdom:—H. R. Bateman, M.R.C.S., L.R.C.P., McGill College, Montreal; J. B. Cautley, L.S.A., St. Bartholomew's Hospital; H. A. Davidson, M.B., Ch.B., Aberdeen University; T. Finucane, M.B., B.Ch., R.U.I., Queen's College, Cork; J. L. Jones, L.R.C.S. Irel.; H. G. Pinches, M.R.C.S. Eng., L.R.C.P., St. Thomas's Hospital; W. Riach, M.D., D.P.H. Edin., Edinburgh University; G. F. Sheehan, L.R.C.P., L.R.C.S. Irel.; S. B. Smith, M.D. Dub., Trinity College, Dublin; W. M. B. Sparkes, M.R.C.S. Eng., L.R.C.P. Lond., King's College Hospital; T. F. White, L.R.C.P., L.R.C.S. Irel., Dublin; W. L. Steele, M.R.C.S. Eng., L.R.C.P. Lond., University College Hospital; A. J. W. Wells, M.R.C.S. Eng., L.R.C.P. Lond., St. Bartholomew's Hospital; A. R. C. Parsons, M.R.C.S. Eng., L.R.C.P. Lond., King's College Hospital; and E. W. Powell, L.R.C.S., L.R.C.P. Edin., Queen's College, Cork.

DEATHS IN THE SERVICES.

Deputy Inspector-General George Thomas Galbraith on Oct. 24th at Stirling, in his eighty-third year. He entered the service in 1841 and retired with the rank of Honorary Deputy Inspector-General in 1868. He served with the 99th Regiment in the New Zealand war and was present at Ohaeawi and Ruapekapeka, receiving the medal. He was the senior medical officer present during the greater part of the operations in the southern district of New Zealand at several skirmishes in the Valley of the Hutt, also at the Horokiwi on August 6th, 1846. In 1860 he was with the expeditionary force in the North of China (medal).

Surgeon-General Jones Lamprey (late), A.M.S., in his 78th year, on Oct. 29th, at his residence, Portland-terrace, Southsea. He joined the service as assistant surgeon in 1850 and retired in 1889, after reaching the rank of Surgeon-General. He served with the 67th Regiment throughout the campaign of 1860 in North China, including the action of Sinho, the taking of Tangku, the storm and capture of the inner Taku Fort, and the surrender of Pekin (medal with clasp). He also served in the operations against the Taeping rebels in 1862, including the recapture of Kading.

Captain P. H. Whiston, R.A.M.C., has been chosen one of the officers of the guard of honour in connexion with the inauguration of the Australian Commonwealth.

An analysis of the occupations of the officers and men of the City Imperial Volunteers published in the *Times* shows that among the officers there were one medical student and one surgeon. In the ranks there were 11 men connected with the medical profession.

WEST OF ENGLAND EYE INFIRMARY, EXETER.—The annual meeting of the friends of the West of England Eye Infirmary was held on Oct. 26th, under the presidency of the Rev. E. Chatterton Orpen. The medical report stated that 2845 patients had been under treatment during the past year. The financial statement showed that the total receipts amounted to £1392 and that there was a favourable balance of £86. The chairman stated that the first two sections of the new buildings were now nearly completed. He added that the cost of the new premises would be about £16,000, towards which £8000 had been at present contributed.

Correspondence.

"Audi alteram partem."

"APPENDICITIS."

To the Editors of THE LANCET.

SIRS,—In the interesting address on the above-named disease in THE LANCET of Oct. 27th (p. 1181) by Mr. Littlewood he says that the whole subject of appendicitis is of recent development—15 or 20 years at most. I felt quite staggered when I read this, remembering that it is 55 years since I was a student and at that time it came into the regular medical course, besides being the subject of clinical lectures in the ward and post-mortem room. When a few years later I started in practice I saw several cases in consultation. Typhlitis was a well-known recognisable complaint and its true cause was discovered after death in the shape of a calculus. But I will give a few extracts from Bright and Addison's "Practice of Medicine" which has the year 1836 (64 years ago) on its title-page denoting the time of its publication. In this volume there is a chapter on Inflammation of the Cæcum and Appendix Vermiformis, occupying six pages. It commences: "That portion of the intestine which is lodged in the right iliac region is frequently the seat of inflammation and affords peculiar symptoms with which it is right the student should be well acquainted." The writer then fully describes the symptoms, saying that the patient after suffering severe pain in the abdomen becomes very ill with chills, sickness, &c., when there is found a hardness and tumefaction in the right iliac region, the local peritonitis may become general and fatal, or an abscess may form which when opened gives exit to a fœtid pus owing to its being mixed with feculent matter. The discharge may continue for many weeks and the patient sink from exhaustion; in other cases the abscess closes and perfect recovery is obtained. After this description follows a paragraph headed "Morbid Appearances." "From numerous dissections it is proved that the fæcal abscess thus formed in the right iliac region arises in a large majority of cases from disease set up in the appendix cæci. It is found that this organ is very subject to inflammation, to ulceration, and even to gangrene, and moreover that it is occasionally thickened and ulcerated from tuberculous deposits, if the peculiar diathesis favours that change, so that this little worm-like body is often detected in the midst of the abscess, with a perforation at its extremity; or by ulceration in its parietes, a considerable portion of it, nearly or entirely separated, is found in a disorganised condition amongst the pus and fæces which fill the abscess. In other cases the appendix is truncated within a short distance of its origin from the cæcum."

The next paragraph is headed "Exciting Causes." "It is possible that the secretions of the appendix itself may sometimes become diseased; at other times oval masses of fæces or foreign substances have been detected in the appendix, but one of the most common causes is undoubtedly the formation of a peculiar concretion which is moulded to the extreme cavity of the canal and which is composed of coats or layers of the earthy phosphates with occasionally layers, probably, of animal secretion or feculent matter." Then further particulars are given, followed by the treatment.

All this I was taught as a student; it is, therefore, needless to quote much from my own lectures on Pathological Anatomy published in the year 1859—more than 40 years ago. There I have a chapter headed Inflammation of the Cæcum and Appendix. "The affections of this part of the bowel are so frequent and important that it is necessary to speak of them separately. When an inflammatory process has been confined to the coats of the gut itself the term *cæcitis* or *typhlitis* has been given and when the cellular tissue around is specially involved *perityphlitis*. It is not clear, however, that any one form of disease is here intended by those who make use of these expressions or that idiopathic inflammations corresponding to these frequently occur, for we know, indeed, that the diseases of the part arise generally from some prior morbid process in the appendix." I then give further particulars about the wax-like secretion which forms in the appendix and afterwards becomes earthy and how this from its form and consistence was

often thought to be a date stone which had fallen into the pouch.

Those who know me never regard me as a "*laudator temporis acti*," and therefore, without any such feeling in the matter, I unhesitatingly state that no new fact or any development whatever with respect to appendicitis has been brought to light since the description of the disease more than half a century ago. The only novelties are a new name and a new treatment by the surgeon's knife. The name I dislike, as I have always considered that the nomenclature of disease should be clinical and not pathological. I trust that Mr. Littlewood will not view my remarks in the light of a criticism on his admirable essay but only as adding further to the history of a very interesting and important complaint. I am, Sirs, yours faithfully,

Grosvenor-street, W., Oct. 27th, 1900. SAMUEL WILKS.

THE ALLEGED EXISTENCE OF A "FOURTH DISEASE."

To the Editors of THE LANCET.

SIRS,—My attention has been called to an article by Dr. Clement Dukes, "On the Confusion of Two Different Diseases under the Name of Rubella (Rose-rash)."[1] In this article the writer claims to have established the proposition "on definite and analysed grounds that two clearly distinguishable diseases exist." The great importance of such a proposition demands much fuller criticism than the article in question appears to have received. None of your correspondents challenge Dr. Dukes's deductions and Sir William Broadbent even goes so far as to say that he accepts them "without hesitation." I venture, however, to think that the profession in general will require very much fuller investigation into such an admittedly difficult subject before it will be equally prepared to commit itself.

If we analyse Dr. Dukes's paper we find that he records three series of cases—(1) supposed "fourth disease" alone (16 cases); (2) scarlet fever concurrent with supposed "fourth disease" (31 cases); and (3) supposed "fourth disease" alone (19 cases), in which nine of the cases had had rose-rash on some previous occasion. On these three series Dr. Dukes bases his claim to have discovered a new disease. Let us take them separately. The first series of cases occurred in 1892. Dr. Dukes's diagnosis at the time was rose-rash of the scarlet fever variety. Eight years later he modifies his diagnosis and describes them as being the "fourth disease." No reasons for this are given, so for the sake of argument let us consider his original diagnosis as correct and regard them as having really been rose-rash.

The second series is the one to which Dr. Dukes attaches chief importance, and he considers that it alone is sufficient to establish the existence of the new disease. He says of it: "This epidemic proves incontestably that, besides scarlet fever, there is another malady, which I have provisionally named the 'fourth disease,' and that the one affords no protection against the other." This is a series of 31 cases in which seven boys had scarlet fever alone, 14 boys had supposed "fourth disease" alone, nine boys had scarlet fever shortly following supposed "fourth disease," and one boy had supposed "fourth disease" shortly following scarlet fever. Now, unfortunately, Dr. Dukes gives us very little information as to the clinical features of the supposed cases of "fourth disease" in this outbreak. He merely informs us that he was "summoned to a consultation on account of an epidemic which was regarded as the scarlatina variety of rose-rash (rubella)." No evidence whatever is adduced to prove that the cases were not rose-rash beyond Dr. Dukes's opinion to the contrary. Yet, although there is nothing at all inconsistent with the view that the epidemic was merely rose-rash concurrent with scarlet fever, we are expected to admit the existence of a new and hitherto unrecognised disease.

We now come to the third and last series of cases and here Dr. Dukes would strain our credulity to the uttermost. This was an outbreak affecting 19 boys, beginning on March 19th, 1900, and ending on April 1st. According to Dr. Dukes this was "clearly an epidemic of the 'fourth disease' alone." He describes it as follows: "The illness resembled scarlet fever more closely than any other series of cases I have yet seen, due not only to the marvellous resemblance between the rash and that of scarlet fever, but also to the copious desquamation of the skin which in some instances succeeded."

In a *résumé* of the cases in this series we are told that the eruption "in nearly every case was very full and quite characteristic of scarlet fever. In fact, if ten experts had inspected the skin and made no other investigation all would have diagnosed the eruption as that of scarlet fever." The fauces were red and swollen. The temperature ranged from 99·4° to 104·2° F. The desquamation in some cases was very profuse, in one case the skin actually peeling off in sheets. The incubation period, one of the very few characteristics in which (according to the table given by Dr. Dukes) the "fourth disease" differs markedly from scarlet fever, *could not be ascertained in this series*. Lastly, not one of the 19 cases had previously had scarlet fever. Of the remaining points noted in connexion with this series there is not one at all inconsistent with the view, which I think most unbiased men will hold, that the outbreak was nothing more or less than simple scarlet fever. Dr. Dukes attaches importance to the fact that although the cases were sent home on April 3rd, the parents being informed that the epidemic was not scarlet fever, only one case came to his knowledge during the holidays which was diagnosed as scarlet fever. So far as this is positive evidence it supports the view that the cases were only scarlet fever, whilst in so far as it is negative evidence it proves nothing. This much is certain—that if this last series of cases is "fourth disease" there is not the least danger of the new malady being confused either with rose-rash or with measles. And yet Dr. Dukes tells us that it is what has hitherto been regarded as merely a variety of rose-rash and that children who are supposed to have had measles three times have really had English measles, German measles, and "fourth disease." Could anyone possibly mistake for measles or rose-rash such a disease as the one just described? Moreover, this last series of cases so closely resembling scarlet fever clearly differs very considerably from the first two series which resembled rose-rash; hence we can only conclude that there are two varieties of the new disease, differing from each other at least as much as the two varieties of rose-rash which Dr. Dukes has tried to split up.

There remains Dr. Dukes's table in which he sets forth the specific differences, as he sees them, between rose-rash, "the fourth disease," and scarlet fever. As regards the differentiation of the "fourth disease" from scarlet fever the principal point of distinction would appear to be that the incubation period in the former is from nine to 21 days, the same as in rose-rash, yet, as already pointed out, this important point of distinction was not ascertained in the last series of cases which so closely resembled scarlet fever. Another alleged distinction is that the duration of infectiousness in the "fourth disease" is only from 10 to 21 days. We may reasonably ask how Dr. Dukes has ascertained this with such a short experience of the disease. So, also, as regards the statement that its season is "spring and summer." Some stress is laid on the fact that the tongue, though it may be furred, is never a typical "strawberry" tongue. I think that most will agree with me that the typical "strawberry" tongue is too often absent in scarlet fever for much importance to be attached to its absence in a short series of cases. The alleged enlargement of the glands would at first appear of some importance, yet in another part of the paper Dr. Dukes says that in his experience "the lymphatic glands are always enlarged and tender whenever a copious eruption occurs on the skin from any disease." It would take too long, however, to criticise the various points seriatim. Most of them on examination will be found to be distinctions without any real difference; and, after all, the total number of cases of the supposed new disease on which the table must have been based is far too small for it to have much value. The first series, which occurred eight years ago and was diagnosed at the time as rose-rash, may fairly be excluded from the case, and the second series was so complicated with scarlet fever that many of the cases must have been valueless.

To briefly summarise, the weak points in Dr. Dukes's thesis are: 1. There is no proof that the first series of cases of supposed "fourth disease," diagnosed eight years ago as rose-rash, included anything other than rose-rash. 2. There is no proof that the second series of cases of supposed "fourth disease," running concurrently with scarlet fever, included

[1] THE LANCET, July 14th, 1900, p. 89.

anything other than rose-rash concurrent with scarlet fever. 3. There is no proof that the third and last series of cases of supposed "fourth disease" included anything other than simple scarlet fever. Indeed, the evidence given points to its being so.

It would be rash to deny the possibility of an unrecognised disease existing and closely resembling scarlet fever though distinct from rose-rash; but very much stronger proof must be forthcoming than any yet adduced by Dr. Dukes before it can be admitted that he has discovered and identified such a disease.

I am, Sirs, yours faithfully,

C. KILLICK MILLARD, M.D., D.Sc. Edin.,
Late Medical Superintendent, Birmingham Fever Hospital.

Town Hall, Burton-on-Trent, Oct. 27th, 1900.

MEDICAL SERVICE IN THE HIGHLANDS AND ISLANDS OF SCOTLAND."

To the Editors of THE LANCET.

SIRS,—Poor-law medical officers in the highlands and islands of Scotland are again greatly indebted to you for your able and outspoken leading article in THE LANCET of Oct. 20th (p. 1144). Could such an exposition find its way to our legislators our condition would probably soon be remedied. Our thanks are none the less due to Dr. William Bruce, than whom none knows our condition better, for his letter in THE LANCET of the same date (p. 1163). He states the remedies clearly and practically, but with all respect to his wide experience and matured judgment I would like to comment on the following points. Regarding his second proposal there are no objections but the difficulty of getting the Government to pass a Bill in our favour, and to endeavour to obtain this is precisely our intention. Of course, parish councils will object, hence the futility of consulting them. One half of them will not admit our grievances and the other half cannot see them, but both sections will immediately unite to prevent us by every means in their power from getting our rights. Poor-law medical officers have not been under the heel of parochial boards and parish councils all these years without fully estimating the latent possibilities of these gentlemen. The other and graver difficulty is the fact that only two or three men amongst us will have the whole fighting to do and have a host of parish councils against us, then the question arises, which will the Government believe?

Dr. Bruce says: "Seeing that the public at large really helps to pay for medical attendance to all and sundry in these parishes it ought to have its say in making and unmaking these appointments." Given an average parish of from 2000 to 3000 inhabitants with a pauper roll of, say, 70 and the payment to the medical officer *from the parish funds alone* on an average of £20 to £25 (which is only sufficient to keep his horse), ought these to have a say in the making and unmaking of appointments? A medical man receiving such a trifle is practically giving his services to that parish. I admit that he gets the other half of his salary from the medical relief grant and a precarious income from private practice, but with these the public at large (I mean the ratepayers of this said parishes) have nothing whatever to do. Even in private practice in these parishes a humane doctor cannot possibly charge what would remunerate him for his services. That trifling amount from the parish funds, besides partly remunerating him for attendance on paupers, has to cover attendance and medicine to all and sundry non-pauper—poor folk who cannot pay him. He has also to visit the different districts periodically, so that his services may be at the disposal of everyone. The above facts form the basis of our argument for an increased salary.

Regarding the suggestion that the Local Government inspecting officer would see justice done to the parish medical officer, I am afraid that during his summer trip to the highlands and islands he would be unable to settle disputes between parish councils and their medical officer; but how he could be constituted a judge of the professional competence or incompetence of a medical man either before or after his appointment by the parish is a question which, I think, admits of an obvious answer. I again offer my thanks to you and also to Dr. Bruce for your ready sympathy and interest in our cause.—I am, Sirs, yours faithfully,

HENRY PEARSON TAYLOR, M.B., C.M. Aberd.

Reafirth, Mid Yell, Shetland, Oct. 26th, 1900.

"AUTO-INFECTION THROUGH THE MOUTH A POSSIBLE CAUSE OF RELAPSES IN ENTERIC FEVER."

To the Editors of THE LANCET.

SIRS,—I was much interested by Mr. G. W. Ord's letter on this subject in THE LANCET of Oct. 13th (p. 1097). I not only agree with his views in this particular connexion but I am satisfied that physicians may trace many cases of self-poisoning in various infective diseases to the same source. Nay, more, I would go further, and add that I am satisfied, from experience, that an unhealthy state of the mouth is a fertile and very common cause of ill health. We are all agreed upon the importance of wholesome fresh air in contending with tuberculous and other cachexias from the poisonous effect of re-breathed air, sewer-gas, and the like. What, then, are we to anticipate when every breath which a patient draws is infected, more or less, by an unhealthy state of the mouth? Of latter years I have made it a habit to examine the mouths of all patients, and in a large proportion of cases I find quite enough there to account for bad health.

To give a single instance in illustration I will quote the case of a young man who was sent to me last year from the county of Wexford for advice about apprehended phthisis. This youth was in a very low and markedly marasmic state. On examining his chest I failed to detect any morbid change. On bringing him over to the window to examine his mouth I found 14 carious teeth in the upper jaw, exhaling a fearful odour, which he was breathing day and night, and the secretion from which, with accompanying gumboils, he was constantly swallowing. I advised the removal of the teeth for the complete hygienic restoration of the mouth and I was not disappointed by the result which followed. The diseased teeth having been removed—painlessly under ether—the mouth was restored to a healthy condition, a set of artificial teeth replaced the diseased ones, and satisfactory mastication became possible. Within six months this youth was restored to health. This case is one of countless similar ones. Besides bad teeth we find many other morbid conditions of the mouth, the gums, ill-adjusted and non-removeable false teeth, suppurating alveolar abscesses, often painless, unhealthy conditions of the nasal and pharyngeal mucous membranes, a gross neglect of cleanliness, and so on, which mean, in fine, that the patient is breathing an infective atmosphere and swallowing poisonous secretions. If a lack of fresh air and the presence of sewer-gas and foul air in a dwelling-room are sufficient to poison a patient, what shall we say of such a condition as I described above? I am under the strong impression that this source of bad health is not sufficiently attended to in every-day life and often overlooked and therefore I trespass on your valuable space in calling attention to it. I believe all physicians will agree in my views, but I fear we are not sufficiently energetic in urging them on our patients. Others, younger than I am, may, I believe, with great advantage to the public health, work out the problem to which I now briefly allude.

I am, Sirs, yours faithfully,

F. R. CRUISE, M.D. Dub.,
Consulting Physician to the Mater Misericordiæ Hospital, Dublin, and to the National Hospital for Consumption in Ireland.

Dublin, Oct. 24th, 1900.

AN ANOMALOUS SITUATION CREATED BY SECTION 4 OF THE INFECTIOUS DISEASE (PREVENTION) ACT, 1890.

To the Editors of THE LANCET.

SIRS,—I venture to address you on a subject which I think may possess some interest for my brother medical officers of health—viz., the anomalous situation created by Section 4 of the Infectious Disease (Prevention) Act, 1890. This was brought prominently to my notice by an incident which occurred recently in my district. It came to my knowledge that a case of infectious disease (diphtheria) was existent at a dairy just outside the borough boundary. I immediately visited this dairy and upon inquiry I found that milk from it was being supplied in fair quantities to a retail milkseller, as well as to private persons resident in this town; in fact, had it not been for my visit

eight gallons of milk and 18 lb. of butter would have been sent into the town within an hour. I also found that the person in charge of the dairy was in direct contact with the sick person. I thus had every reason to suspect this milk as being likely to cause infectious disease within my district.

But by the Infectious Disease (Prevention) Act, although we as medical officers of health are empowered (on the order of a magistrate) to inspect any dairy if we are of opinion that infectious disease is caused, or is likely to be caused, in our district by milk supplied from such dairy, we can take no action, legally, to prevent the sale of this milk until infectious disease is (actually) caused.

Now, Sirs, this is where the anomalous situation is apparent: that we, who are appointed by law medical officers of health for the express purpose of preventing, as far as possible, the occurrence of disease are debarred, forsooth (by this same law) from taking any action until it has actually occurred! Surely this is the most perfect example of "locking the stable door after the horse has been stolen." I say nothing of the cumbersome and tardy method of procedure permitted us under this section, as I feel sure that every medical officer of health has his own system for overcoming this difficulty.

I am, Sirs, yours faithfully,

CHARLES H. RUSSELL,
Great Yarmouth, Oct. 28th, 1900. Medical Officer of Health.

"THE ANÆMIA OF DYSPEPSIA CONSEQUENT ON DIRT-EATING."

To the Editors of THE LANCET.

SIRS,—Mr. A. J. B. Duprey's remarks on the above subject in THE LANCET of Oct. 27th (p. 1192) are most interesting. Dirt-eating, or geophagy, is a subject which has been mentioned by many travellers, but the dire results of this filthy habit have not been investigated with care by medical men. St. Lager is the only author to my knowledge who has attempted to collect any information on this matter and a short *résumé* of his remarks may be of interest to your readers. First, then, geophagy was observed by Humboldt to be prevalent amongst many Indian tribes, notably the Ottomacos, the women employed in potteries being the chief offenders. Auguste de Saint-Hilaire observed dirt-eaters in the interior of Brazil and also along the coast-line. De Castelnau noticed geophagy in the eastern portion of Bolivia. Cotting saw children eating dirt in the canton of Richmond, between Augusta and Savannah. He goes on to say that "they become pale, sicken, and die."

Geophagy has also been observed in the Antilles, in Jamaica, Hayti, Puerto Rico, St. Thomas, St. Martin, Guadaloupe, Martinique, St. Domingo, Guiana, Peru, Louisiana, Alabama, Georgia, Florida, and South Carolina. In Africa the habit has been observed among the deltas of the Senegal, in the islands of Los Idolos, and at Sierra Leone, and in other parts of the world, in Java, New Caledonia, New Zealand, and Siam. This pernicious habit, according to various observers, has frequently resulted in anæmia, marasmus, and ultimate death. The dirt consumed in most cases seems to be some kind of clay or marl; in several instances the earth forming the habitation of termites has been preferred. The habit became such a passion in certain victims that one observer records seeing muzzled slaves grovelling on the ground and attempting to inhale particles of dust. Hindoo and Chinese women have been known to eat meerschaum (*écume de mer*). In Guinea the negroes used to eat a yellow earth called *caouac* and became ill in consequence. In Java a ferruginous clay was sold in the public markets and consumed by purchasers. The clay used in New Zealand was a species of talcous schist in which copper was found. Another substance commonly partaken of in certain localities was native alum (*beurre de roche*); gypsum by others was used as an ingredient of bread—a custom not unknown to the modern baker! Geophagy is interesting also in connexion with endemic goitre. The drinking of certain muddy waters is associated with the incidence of goitre, for instance, Richardson, a companion of the unfortunate Franklin, noticed at Fort Edmonson, on the North branch of the Saskatchewan, that those who drank the muddy water of this river became goitrous. In other instances the drinking of mud-laden waters is not associated with goitre, which seems to prove that some particular earth or mineral causes goitre. It would be interesting if Mr. Duprey can tell us if goitre is found in any cases of dirt-eating that he has had to deal with.—I am, Sirs, yours faithfully,

LOUIS E. STEVENSON, M.B. Cantab., F.G.S.
Temple Sowerby, Penrith, Oct. 29th, 1900.

"THE ETIOLOGY OF RHEUMATIC FEVER."

To the Editors of THE LANCET.

SIRS,—We have read with care some letters published in THE LANCET of Sept. 29th (p. 970), Oct. 13th (p. 1098), and Oct. 27th (p. 1235), written by Mr. Lennox Browne, Mr. E. F. Grün, and Dr. Alfred Mantle respectively. These three letters dealt with points in our paper upon the Etiology of Rheumatic Fever, which was published in THE LANCET of Sept. 22nd (p. 861) and 29th (p. 932). To the letters of Mr. Lennox Browne and Mr. E. F. Grün we saw no reason to make reply except by private letters. To Dr. Mantle's letter in THE LANCET of Oct. 27th (p. 1235) we are compelled to reply in justice to him and in justice to ourselves. The tenour of each of the letters is the same—we have hardly done due credit to the writer's work upon this subject. In replying to Dr. Mantle we take the opportunity to acknowledge also the letters of Mr. Lennox Browne and Mr. Grün. In the first place it will be wise to state what claims we made for ourselves. They were two—the first, that as a result of an investigation, clinical, pathological, and bacteriological, supported by experiments made for us by Mr. H. G. Plimmer, we demonstrated that certain diplococci were *a* cause of rheumatic fever; the second, that we were, to the best of our knowledge, the first to demonstrate these diplococci in a rheumatic nodule. We are thus, fortunately, absolved from any errors of commission, though not from those of omission. Further we wrote as follows: "But we have started upon the assumption that it (i.e., rheumatic fever) is an infection, being led to this conclusion by the results of clinical and pathological experience and teaching," implying by these words that English teaching had led us to this assumption.

Mr. Lennox Browne claimed in his letter priority among "the moderns" for his insistence upon the association of rheumatic fever and tonsillitis. We do not intend to enter upon questions of priority, but it is clear from his published writings that he fully recognised the importance of this association. The recognition of this is, in our opinion, an important step in the history of the theory that rheumatic fever is due to an infection of microbic origin. Mr. E. F. Grün claimed that we had corroborated his observations as to the invariable presence of a specific organism in the blood of patients suffering from rheumatic fever. We entirely fail to see the truth of this. Diplococci were present, it is true, in the *cultures* made from the blood of two patients suffering from rheumatic pericarditis and we discovered them growing in chains in the media after incubation. We did not demonstrate them in blood films as Mr. Grün claims that he did. This point is, however, but a small one. Clearly, before we can give Mr. Grün any credit for his observations we must either see his preparations, or ourselves confirm his statements, or see a confirmation of them. One slide he kindly sent us certainly showed numerous diplococci and other organisms. It was, however, a spleen preparation, not a blood film, and therefore has no bearing upon this question.

To Dr. Mantle we owe an apology which we freely give. We were, to our regret, unaware of his researches and we briefly allude to them now. Dr. Mantle in the *British Medical Journal*, June 25th, 1887, wrote a paper upon the Etiology of Rheumatism considered from a bacterial point of view. From seven cases of this disease he obtained, with due precautions, fluid from the knee-joints and obtained growths upon gelatinised meat infusions. He also demonstrated bacteria in the blood in 16 more acute cases, some subacute cases, and 10 cases of rheumatism in childhood. The bacteria were a micrococcus occurring sometimes as a diplococcus and a small bacillus. Dr. Mantle demonstrated these organisms at the time of the reading of the paper and figured them in his paper. They throve best in an acid medium and their growth on the solid media gave "a pretty reticulated brown appearance." He also obtained each organism in pure culture. No experiments were made with animals, and Dr. Mantle expressly stated that these alone

could decide the question of their specificity. There can be no doubt that in 1887 Dr. Mantle fully recognised the likelihood of rheumatic fever being due to an infection, and that he further carried out some important and laborious investigations in support of his contention. Most of our references to foreign workers were chosen because of the experimental work they had carried out, but had we been aware of Dr. Mantle's paper we should certainly have alluded to his researches.

One sentence in Dr. Mantle's letter we should like to interpret carefully. Dr. Mantle writes: "I am thankful to find that it has been now clearly demonstrated by the experiments of Dr. Poynton and Dr. Paine that the diplococci alone or with other micro-organisms are the cause of rheumatic fever and its complications." We believe we have demonstrated that a certain micro-organism in the form of a diplococcus is *a* cause of rheumatic fever. Valvulitis, pericarditis, arthritis, tonsillitis, probably pleuritis and chorea, are manifestations, not complications, of rheumatic fever, and results of this diplococcal infection. Whether right or wrong the view has the merit of being definite and not complicated by the question of secondary infections, and it is the outcome of our investigation. We concluded that such bacilli as were present were not a cause of the disease. Whether or not the diplococci are the *only* cause of rheumatic fever we are not as yet in a position to state.

We are, Sirs, yours faithfully,

F. JOHN POYNTON, M.D., M.R.C.P. Lond.,
Assistant Physician to the Hospital for Sick Children, Great Ormond-street;
ALEXANDER PAINE, M.D. Lond.,
Assistant Bacteriologist to St. Mary's Hospital, London.

Oct. 29th, 1900.

THE DIAGNOSIS BETWEEN PERICARDIAL EFFUSION AND ENLARGED HEART.

To the Editors of THE LANCET.

SIRS,—Although I have not any additions or corrections to make to the lines of diagnosis suggested in 1896,[1] the importance of any means whereby mistakes may be obviated which are always serious but sometimes, as in the case of fatal puncture of the heart quoted by Dr. Norman Moore,[2] disastrous, is a sufficient excuse for re-stating facts not yet generally utilised. Independently of skiagraphy, any expert percussor can rapidly and safely identify an uncomplicated enlargement of the heart, or, on the other hand, a considerable effusion with or without cardiac enlargement; and the recognition of smaller collections, as in "ephemeral pericardial effusions," on the same lines merely needs slight additional care and experience.[3] The *anterior test* is applied to that extension of the dulness over the right fifth interspace which was first insisted upon by Rotch, but is not in itself diagnostic. It consists in the sharp contrast between the outlines of dulness of a pericardial effusion and of the right border of the heart. The *posterior test* is even more reliable, as it is independent of the influence of partial agglutinations which sometimes exclude the fluid from the anterior corners of the pericardium. It is therefore essential that this test should not be misunderstood. The familiar infra-scapular patch of tubular breathing and ægophony to which Sir William Broadbent refers in his third edition[4] in connexion with my name is often set up, particularly in small chests, by a simple enlargement of the heart with compression and engorgement at the left base. This sign was put forward as merely confirmatory and not distinctive, and as "occurring also in pleural effusions." It is the other sign, the "lower dorsal dull patch," which is of practical use in difficult cases. "The value of this sign is that, unlike many others, it is very sharply defined and does not fit any other diagnosis."[5] The almost median position of this dulness below the tenth rib, that is, below the vault of the diaphragm, its quadrilateral shape, and its extension to the spine and beyond it for one or two inches into the right chest render it quite unmistakable, unless it should be merged into the dulness of a double pleural effusion. I do not remember that any of the pupils to whom it has been demonstrated failed to recognise it; the failure of some of their first attempts to elicit it does not, of course, invalidate the test. I have examined for this characteristic dulness numerous cases of excessive enlargement of the heart, but always in vain, and I am satisfied that it cannot be produced by the latter. An actual demonstration to the contrary would therefore possess much value. As a fact, however, the dulness in question is not the dulness of the heart or of the fluid effusion, but is a dulness merely induced by the presence of fluid higher up. The patch of dulness being situated below the level of the floor of the pericardium is not likely to be caused by an enlarged heart.

I am, Sirs, yours faithfully,

Curzon-street, W., Oct. 26th, 1900. WILLIAM EWART.

[1] Cf. "Practical Aids in the Diagnosis of Pericardial Effusion in Connexion with the Question as to Surgical Treatment," Brit. Med. Jour., March 21st, 1896, p. 717. "Remarks on the Dorsal Test for Pericardial Effusion"—An Addendum, Brit. Med. Jour., Jan. 23rd, 1897, p. 185.

[2] Cf. Hunterian Lecture, THE LANCET, Oct. 20th, 1900, p. 1123.

[3] "On Latent and Transient Pericardial Effusion," THE LANCET, Nov. 21st, 1896, p. 1446. "Cases of Latent and Ephemeral Pericardial Effusion," Transactions of the Clinical Society of London, vol. xxxi., p. 97.

[4] Cf. "Heart Disease with Special Reference to Prognosis and Treatment," third edition, 1900.

[5] Cf. Brit. Med. Jour., loc. cit.

"THE CAUSE OF CARIES OF THE TEETH."

To the Editors of THE LANCET.

SIRS,—Mr. A. Berlyn's statement in THE LANCET of August 25th, 1900, p. 629, regarding the majority of South African natives, that "their only method of cleansing their teeth is to fill the mouth with water and rub the teeth with the finger," may be very true as applied to those natives who live in the towns. The typical "Red Kaffir" at home invariably after each meal rubs his teeth with a little of the cold wood-ash from the fireplace, afterwards flushing his mouth with water, a proceeding that may in a measure account for the absence of tartar and the fine colour of the teeth. As to food, the "Red Kaffir" does not often eat "mealie meal" which, as a rule, he is obliged to buy, and "mealie meal" of his own manufacture bears little resemblance to the properly ground mealie. His ordinary food consists of either the unground "mealie" or the "stamped mealie," from which the fibrous shell is removed by means of pounding in a wooden mortar. In either case when cooked the resulting "porridge" is certainly soft to handle, but one finds it extremely glutinous and somewhat tough to masticate. During the "mealie" season the "green mealie"—the unripened "cob"—is greatly relished. These "cobs" are, as a rule, roasted at the side of the fire and though undoubtedly palatable are decidedly tough and require considerable mastication. In this portion of the country and in the native territories, too, I have often noticed a flattening and often actual cupping—caries apart—of the crown surfaces of the teeth, more particularly of the molars, and this not only in the Kaffir but also in those colonial-born whites whose food has consisted mostly of "mealies." How long the native has cultivated the mealie seems somewhat uncertain. It is not mentioned by travellers in Africa before the sixteenth century, and though probably first imported from America I can find no mention of its introduction to this country. In 1687 a shipwrecked crew in Natal victualled a ship of their own construction with provisions purchased from the natives, and though Kaffir corn, salted and smoked meat, goats, fowls, and pumpkins are mentioned, the "mealie" is conspicuous by its absence. Before civilisation overwhelmed him the "Red" rejoiced not only in his own flocks but in the risks and excitement of the chase, and skilled as he was in the use of his own weapons his larder was accordingly always well stocked with meat. His love for meat still exists, but the inevitable "mealie" forms his staple food, and as long as there are "mealies" and Kaffirs the latter will continue to consume the former and maintain his fine teeth and well-formed jaw in the best of condition.

I am, Sirs, yours faithfully,

THOMAS QUERNEY, M.R.C.S. Eng., L.R.C.P. Lond.

Komgha, Cape Colony, Oct. 6th, 1900.

THE DANGERS OF "TICKLERS."

To the Editors of THE LANCET.

SIRS,—Passing along the Strand yesterday (C.I.V. day) I saw a peacock-feather-tip thrust into the eye of a person obviously suffering from purulent ophthalmia. Almost immediately thereafter the same feather-tip was sent

perilously near the healthy eyes of another person. Comment is needless; other diseases may possibly be conveyed in similar manner. Can nothing be done to suppress this dangerous nuisance?

I am, Sirs, yours faithfully,
ARTHUR J. HARRIES, M.D. Brux.

Adam-street, W.C., Oct. 30th, 1900.

TENDER FOR CONTRACT BY MEDICAL MEN.

To the Editors of THE LANCET.

SIRS,—I enclose copy of letter received from the Castleford Urban District Council about attendance on cases at the infectious hospital, and I should be grateful for your opinion on the matter. Hitherto it has been the custom for each medical man to attend his own patients at the hospital and to make his own charges to the council. Personally, I feel it would be an unprofessional act to "tender" for an appointment in this way, and I propose to write to the council to this effect. I am, Sirs, yours faithfully,

Castleford, Oct. 30th, 1900. W. KEMP, M.B. Edin.

[COPY.]

Urban District Council Offices, Castleford, Yorks, Oct. 29th, 1900.

Re Cases at the Infectious Hospital.

DEAR SIR,—I am instructed by this council to state that, in their opinion, the attendance of different medical practitioners at the hospital is, on several grounds, inadvisable, and that it would be better if one medical gentleman alone had the cases in hand, the council being held responsible for the payment of fees in such cases. If, however, the patients desire to retain the services of their own medical attendant they will be at liberty to do so, they paying his fees; and I am to ask you if you will kindly give us your terms, including medicine and attendance, for cases of infectious diseases at the hospital.—Yours faithfully. H. H. BROADBENT (Clerk).

Dr. W. Kemp, Castleford.

*** The medical men of the district should meet and agree upon the course to be pursued. In this way a decision will be arrived at that is best for the community. We do not think it well that medical men should tender for contracts, and we are certain that where this method is employed the public will be badly served.—ED. L.

"ORTHOPTIC TREATMENT OF CONVERGENT SQUINT IN YOUNG CHILDREN": A CORRECTION.

To the Editors of THE LANCET.

SIRS,—Will you kindly allow me to correct one or two errors in your notice of the paper read by me at the last meeting of the Ophthalmological Society?[1] The report says: "Mr. Worth ..... commonly commenced treatment as follows." This should be: "Treatment adopted by most surgeons was as follows." Again, "The visual acuity of the child's squinting eye was obtained." It will naturally occur to anyone that these small children cannot read Snellen's types. It should have been mentioned that I described a method by which the visual acuity might be ascertained. The report says: "Mr. Worth had found that this treatment in some hundreds of cases caused a disappearance of the squint, &c." What I said was that I had carried out the treatment in some hundreds of cases and in a considerable proportion it had caused a disappearance of the squint, &c.

I am, Sirs, yours faithfully,
Harley-street, W. CLAUD WORTH.

*** We regret the inaccuracy of the report.—ED. L.

THE MEDICAL DIRECTORY FOR 1901.

To the Editors of THE LANCET.

SIRS,—You have frequently been good enough to refer in your columns to the accuracy of the Medical Directory. As you are aware the Directory cannot be up-to-date unless all the members of the profession and the secretaries of medical institutions respond to the editors' requests for information. All persons interested must now communicate with the editors at once, for in a few days it will be too late to attend to any further alterations.

We are, Sirs, your obedient servants,
J. & A. CHURCHILL.

Great Marlborough-street, W., Oct. 22nd, 1900.

THE TEACHING OF HISTOLOGY, ETC., AT ST. ANDREWS UNIVERSITY.

To the Editors of THE LANCET.

SIRS,—I would like to point out a slight inaccuracy, or rather omission, which occurs in your table of classes on page 689 of THE LANCET of Sept. 1st, 1900, which has been brought under my notice. It would appear from this list that I only teach in summer and do not teach histology. I give in winter (1) a full junior course of 100 meetings, (2) a senior (lecture) course of 40 to 50 meetings, and (3) a senior practical course of 50 meetings; and in summer (1) a course of 50 meetings of histology and physiological chemistry and (2) lectures on development and reproduction (see pages 164–166, Calendar, 1900–1901, St. Andrews University). I think your otherwise excellent list hardly represents my classes correctly. I am, Sirs, yours faithfully,

D. FRASER HARRIS.

University of St. Andrews, Oct. 23rd, 1900.

"THE SPAS OF CENTRAL WALES."

To the Editors of THE LANCET.

SIRS,—I am sure that much real good would be done and much valuable instruction gained in the field of hydrotherapeutics if the excellent suggestion of Mr. T. Garrett Horder in THE LANCET of Oct. 20th (p. 1176) could be carried out. I am pretty certain that the majority of our profession are quite ignorant of the sound inducements which are offered by our spas at home. These spas would become better known to the profession and their merits could be sifted therapeutically if the Balneological Society would adopt the suggestion of Mr. Garrett Horder and visit the various spas in this country. He speaks of the beauties of Central Wales and the remarkably bracing effects of the beautiful elevations of that district. He did not speak of the medicinal value of the waters found there. Yet if he will refer to the analyses of these waters and to the clinical records concerning them he will find that we possess near at hand means not excelled by those of any Continental resort of treating patients by a course of waters internally and externally. In the district of which he speaks there are three more or less well-known spas—namely, Llandrindod, Llangammarch, and Llanwrtyd. The first has its sulphur and saline springs, the second its barium and saline waters, and the third its waters like Harrogate. Llangammarch is right in the centre of this beautiful elevated district; it is charmingly situated and enjoys most invigorating air. The hotel is high up and just under the imposing shelter of the Eppynt range (1800 feet). In the *British Medical Journal* of Oct. 20th Dr. Robert Saundby, speaking of Llandrindod, which is close to Llangammarch but not so prettily situated, says that it owes more to its altitude and climate than to the waters, and on this account is so satisfactory in the treatment of nervous exhaustion, dyspepsia, and gout. Quite recently you, Sirs, drew our attention to[1] the iron waters of Shanklin Spa, and at the risk of trespassing on your space I cannot help repeating the valuable opening remarks you made in that article. "In spite of representations to the contrary English people still visit the various spas of the continent, whatever may be the advantages which may be had at similar places in this country. Fashion is doubtless the chief factor which has hitherto been unfavourable to enterprise in regard to the development of English spas. Yet if a list of the natural springs of Great Britain be consulted it will be found that almost all kinds of mineral waters occur in this country. We have thermal baths at Bath, sulphur waters at Harrogate and Llanwrtyd in Wales, and saline springs and barium springs in Wales, not to speak of the chalybeate springs at Tunbridge Wells, Brighton, and elsewhere. In some instances, of course, great efforts have been made to equip these places on a scale similar to Homburg, Wiesbaden, and Schwalbach on the continent, but our home resorts do not possess the renown of the foreign

[1] THE LANCET, Oct. 27th, 1900, p. 1205.

[1] THE LANCET, Oct. 6th, 1900, p. 1029.

spas. Individual enterprise has done what it could but patronage has failed." I venture to think that the Balneological Society would earn the gratitude of the whole profession by bringing before it the undoubted merits of our own spas in the way Mr. Garrett Horder has wisely suggested. I inclose my card.

I am, Sirs, yours faithfully,

Oct. 30th, 1900. VERAX.

"THE ROYAL ARMY MEDICAL CORPS: 'THE REASON WHY.'"

To the Editors of THE LANCET.

SIRS,—"Deadly Seniority's" letter in THE LANCET of Oct. 27th will hardly commend itself at the present moment to officers of the above overworked corps. Is this an opportune moment, when every officer of the corps has been working at high pressure and conspicuous zeal, for "Deadly Seniority" to advocate increased burdens being laid on their shoulders? Rather, I should think, it is time for the authorities to look about them for some means of making the corps more popular among the rising young medical men of the day. It is all very well to advocate extra examinations and increased "special instruction" classes, but when men are laying down their lives on the battle-field and contracting diseases that will last them the remainder of their lives people who "sit at home at ease" like "Deadly Seniority" would serve a better purpose and do more for the well-being of their military *confrères* if they tried to lessen, instead of augmenting, a burden which has proved a great deal too much as it is at present for a great number of officers. The classing of lieutenants of the Royal Army Medical Corps with the subalterns of a line or cavalry regiment as regards their knowledge of the special duties of their corps shows how little "Deadly Seniority" can know of the actual working of the Royal Army Medical Corps, where the knowledge of their professional work is the first and the routine of military work the second point to be considered.

I am, Sirs, yours faithfully,

ONE OF YOUR LATE CORRESPONDENTS IN SOUTH AFRICA.

Oct. 30th, 1900.

NOTES FROM INDIA.

(FROM OUR SPECIAL CORRESPONDENT.)

Great Increase of Plague in India.—Cholera in Kashmir.—Decrease in the Famine.—The Success of the Pasteur Institute.—Famine and Vitality: A Problem.

A FURTHER serious rise has occurred in the mortality from plague throughout India—viz., from 1442 deaths for last week to 2136 deaths for the past seven days. The Bombay Presidency reports 1215 deaths, Bombay city 87, Bengal Presidency 33, Calcutta 104, and the Mysore State 698. The increase seems to be pretty general. Poona is once again in the throes of a severe outbreak, and is having from 60 to 80 deaths from plague every day. Up to a recent date the disease was confined to the city, but within the last few days indigenous cases have been discovered in the cantonment. It will be remembered that the first outbreak in Poona occurred in the first three months of 1897, the second occurred in the last four months of the same year, the third occurred in the monsoon months of 1899, and now the fourth is developing at about the same period of the year as the second in 1897. All seasons have thus been represented with the exception of the hottest months. Plague seems to be rising in Calcutta, while the returns for Bombay city show an ominous fluctuation. In Mysore city there are over 100 cases daily. This general increase is very ominous. Just as a local outbreak develops slowly for some time before the almost sudden explosion of virulence which afterwards doubles or trebles the mortality, so this slowly increasing mortality from plague in so many different places throughout India, showing a concurrent development of the disease at several centres, may be expected to assume alarming proportions at a later period. The present recrudescence commenced in Mysore and some of the towns in the Southern Mahratta country, and while the local outbreaks were reaching their height it has been commencing in Poona. Presently renewed activity in Calcutta and Bombay may be looked for. There are already indications in both cities of a recrudescence of the disease. The general mortality in Bombay city keeps inordinately high. Last week 1026 deaths were returned, and there has been a slight rise to 1043 for the past seven days. Of these 86 were plague and 54 were cholera, so that the excess of over 300 has to be accounted for. Diseases of the digestive system are abnormally prevalent and there are large excesses in the deaths from phthisis and other lung diseases. The situation is unsatisfactory.

The sudden increase in the mortality in Calcutta which has followed the floods (of Sept. 19th to 22nd) which I reported last week still continues and the daily death-roll is about double in size. While cholera, diarrhœa, and dysentery explain a large proportion of these deaths there are others which remain a mystery. The cases returned in the Plague Department as suspicious have increased, but there are still other deaths not readily accounted for. Relapses of malaria from exposure, &c., may explain many deaths, as it is hardly likely that plague would take on such a sudden development. So few natives are really seen during their illness that the diagnosis from reports after death is exceedingly difficult. The increased mortality occurred at first in the suburban districts, but it has since taken place all over the city. The worst-drained and the most malarious districts suffered most.

Cholera still continues severe in Kashmir, where up to Sept. 30th there have been 4634 cases and 2379 deaths.

A drop of nearly another 500,000 is reported this week in the numbers under famine relief, the total for the whole of India being now just over 3,000,000, of whom 693,000 are on relief works and the remainder are receiving gratuitous relief.

The Pasteur Institute at Kasauli under Major Semple, R.A.M.C., is being sought after by all classes. The total number of patients to date is 52—viz., British officers, 7; soldiers, 22; native officers, 1; sepoys, 3; European civilians, 5; and natives, 14. Two Brahmins have commenced the treatment, which may be taken as an indication that high-caste natives are not averse to taking advantage of the institute.

Some curious results are brought out by a comparison of the vital statistics of the North-west Provinces and Central Provinces for the year following the last famine. Both provinces suffered severely from the famine in 1897, but with returning prosperity the increase of births was remarkable. The year ending in 1899 showed a still higher birth-rate. It is said that the districts which suffered most show the rise above the mean rate. This increased birth-rate after famine times has been observed before. The question is whether the cause is physical or social. It may mean that large numbers of marriages which had been temporarily postponed took place with the earliest signs of returning prosperity. On the other hand, the cause may be physiological and may be an effort of nature, so to speak, to replace the loss caused by the famine. This has its analogy in the animal and vegetable kingdoms. Increase of food-supply does not necessarily increase the population and many plants are known to seed better on a poor soil than on a rich one. The increased birth-rate of these two provinces was accompanied by a great rise in infantile mortality. Notwithstanding the famine and the high infantile mortality the population has increased by 700,000, whereas in ordinary years the deaths almost equal the births and the population has been nearly stationary. According to this generalisation next year ought to see a great increase of population (by a great number of births) in all those districts affected by the terrible famine of the present year.

Oct. 4th.

BLACK-BEETLES AND LODGINGS.—At the Paignton (Devon) County-court on Oct. 22nd a lodging-house keeper sued a gentleman for £9 for rent of furnished apartments. Evidence showed that the defendant had engaged the rooms for three weeks from July 14th, but that owing to the prevalence of black-beetles in the bedroom he left after three days. He, however, offered to pay for the three days' use of the rooms. The plaintiff's case was that the rooms were reasonably fit for habitation. His Honour (Judge Edge) held that any person taking a lodging and finding black-beetles there would be justified in leaving and gave judgment for the defendant with costs.

THE UNIVERSAL EXHIBITION OF PARIS.

(FROM OUR SPECIAL CORRESPONDENT.)

(*Continued from p. 1253.*)

THE FOREIGN AND BRITISH SANITARY SECTIONS.

The British Sanitary Section.

IN the British section there is only one stove, that of Messrs. Musgrave, the well-known Belfast firm. In view of the numerous accidents that have happened this firm will not consent to manufacture a portable stove, and further they have now a special air inlet so that fresh air may be mixed with the products of combustion and thus help to oxidise them. It is in the artistic decoration of the stoves rather than in any very recent improvement of construction that this exhibit has made its mark. Further, it is satisfactory to note that these British stoves are much appreciated and largely sold in France, where the method of economic warming by means of stoves instead of open fires has been much more studied and utilised than in England. The largest of all the exhibits is that of Messrs. Doulton and Co. who as members of the jury are *hors concours*. They have two very artistic fire-places made of Doulton ware with slow combustion grates. So much has already been done in respect to the construction of closets and urinals that it is difficult to improve upon the models that are almost perfect, yet in respect to urinals there is a new method of draining them in an open glazed channel which is only covered over with brass grating. There are, therefore, no small pipes and pipe fittings. This means less labour and less chance of a stoppage and consequent nuisance. The water travels in the open till it reaches the gully or trap at the end of the row of urinals. Everything can thus be readily cleaned and those bugbears of urinals, cigar ends, can be dealt with in a summary fashion. Also, instead of the water being delivered all round the top of the urinal it is now discharged in the centre of a spreader or disc placed in front of the pipe. The water is equally and well distributed and this is a simplification in regard to fittings. An asylum closet is shown where there is no sharp edge, angle, or hook, and no chain or string, by which the patient might injure himself. Then there is a bath with a rim around it so contrived that water cannot splash out of it. The outside also as well as the inside is enamelled, and this preserves the metal which is apt to be injured by the action of the atmosphere, especially at the seaside. For a hospital washstand and to prevent the risk of overflow the water is turned on by pressing a pedal with the foot, but after a moment a self-regulating valve shuts off the water. If more is required the pedal must be pressed again. Then to a hospital bottle and pan-washer a glass lid is affixed, which when raised produces a flush that automatically washes out the pan. Also there is a gulley which can be opened for cleansing purposes by removing only two screws and access is then gained to the top of the trap

Opposite Messrs. Doulton's exhibits there are Blackman's well-known ventilating screw fans and Boyle's equally well-known exhaust cowls. Close by Jeyes's Perfect Purifier is the only disinfectant shown in this section.

Mr. George Jennings who has received the highest award—namely, the "Grand Prix"—also makes a very large display of his well-known and excellent sanitary apparatus. He has likewise public urinals with no piping but open channels instead. Then there is a very ingenious urinal for domestic purposes which is closed over by a door; when the door is opened it causes a flush of water, and when closed it looks like an ornamental cupboard. There are some special closets for asylums and railway stations, so contrived that the flushing gear cannot be injured by mischievous or rough treatment. Close by there is a closet pan the porcelain part of which rises about a foot above the back of the seat. The latter has a counter-weight so that it is always raised unless purposely pressed down. When the seat is raised the pan forms at once a urinal and a receptacle for slops. Of course, the same may be said of any closet where the seat can be raised, but in this case the risk of spilling water on the floor is less likely to occur as the back of the pan rises considerably above the level of the seat. There are also some washstands which on tilting the basin disclose a urinal underneath and at the same time the raising of the basin flushes the urinal. Finally, I noticed a closet pump for yachts and other ships, where the force of the pump is arranged so that the contents drawn from the pan of the closet are propelled to some distance from the ship.

Another large exhibit is that of the Établissements Porcher which have the monopoly for the sale in France of the sanitary hardware manufactured by Messrs. Brown, Westhead, Moore, and Co. This exhibit is interesting because it shows us that some 20 years ago there were practically no French manufacturers who produced sanitary closets. Nothing that was then made could prevent the passage of sewer air or automatically insure anything approaching to cleanliness. Such closet pans as existed had to be cleaned with the aid of a brush; an effective flush was unknown. Therefore, the few really sanitary closets that were placed in French houses had at first to be imported from England. Hence to this day the French Porcher Company import largely English goods and therefore exhibit their closets in the British section, for in the main they are of British manufacture though some of the fittings are of French make. The chief feature in the latter is that they have contrived to attach the wooden seat and even the wooden lid to the hardware pan instead of being fixed to the wall behind the pan. One pan is provided with a double syphon and this when the water is discharged produces a momentary vacuum between the two syphons, so that the water is drawn by suction instead of being merely propelled out of the pan. It would require a lengthy series of experiments to judge whether this is an advantage.

The Dutch and Austrian Sections.

Leaving the British section there is a small compartment close to the German section where the Dutch give some information as to the sanitary administration of Holland. For instance, there are photographs of all the sanitary offices at Amsterdam, of the system of disinfecting, and showing how a house is declared to be infected by a notice affixed to the door so that no one can enter unaware of the danger incurred. Then comes the Austrian section which though very small attracts some attention because there is a wax model, life-size, of a calf during the process of collecting vaccine lymph. The precautions taken and the sterilised dressing to protect the vaccinated parts are all displayed in a manner that should dispel whatever apprehension may still remain in regard to vaccination. Very fine coloured maps indicate the distribution of diseases in different parts of the Austrian Empire and there are the exhibits of various institutions and sanatoria, especially for children, but there is nothing in regard to drainage, ventilation, or sanitary engineering.

The Russian Section and the Jenner Memorial.

The Russian sanitary section occupies a very large space, a great portion of which is taken up by wax models. Some of these come from the St. Petersburg Museum of First Help. They are life-size models of accidents to various parts of the body and they show how hæmorrhage may be stopped and temporary dressings made in the absence of, or while waiting for, surgical aid. This is a somewhat ghastly display; it does not fail to attract a large crowd and calls forth many expressions of commiseration. The question is whether many people try to engrave upon their minds the indications given and will remember what to do under similar emergencies. Under the auspices of the Russian Society for the Protection of Public Health, which is patronised by the Government, a public culinary school has been formed and it exhibits wax models of various sorts of meat and of vegetables in both healthy and unhealthy conditions. There are also many other articles, such as coffee and every substitute used for coffee, torrefied maize, wheat, chicory, &c.; in fact, there is here a complete museum of domestic economy. Close by there is a large exhibit of the Russian Red Cross Society. It consists of a field ambulance which has not only a hospital tent, an operating tent, a portable pharmacy, and sterilisers for bandages and instruments, but also a kitchen with all the cooking utensils and all the tools necessary for mending any object belonging to the ambulance. Only a very small compartment of the Russian section is reserved to private exhibitors. Here there is a sort of cupboard with wire arrangements for keeping books open so that they may be disinfected. Then there is a domestic filter, just a simple sandstone to clarify the water, but below inside the pedestal on which the filter is placed is an electric pile, the electrolytic

gases produced thereby being said to exert a purifying action on the water.

What, however, will interest English visitors most is a handsomely decorated compartment which may be described as the Jenner exhibit. This has been the work of Professor Hubert, physician for the children of the poor and secretary of the Russian Society for the Protection of Public Health. This exhibit is a veritable history of vaccination, especially in so far as Jenner himself was concerned. In the centre there is a picture of one of Jenner's first experiments in vaccination; then there are several manuscript letters written by Jenner and four of his own coloured drawings of vaccine pustules. One wall is covered with all manner of caricatures and other prints published when first the question of vaccination began to agitate the public mind. In one case there is the brevet by which Alexander Aspéany was promoted to the rank of sub-lieutenant because he was the first to consent to be vaccinated. This original document bears the signature of Catherine II. and the date of 1768. Jenner's answer, written in 1802, to a letter which he had received from the Empress Maria Feodorowa is likewise shown, as is a collection of medals struck in commemoration of important events in regard to vaccination. There are many drawings and wax models of healthy and of abnormal pustules, and though most of these things are purely historical the latest innovations are also exhibited. Thus what constitutes an entire room is devoted in the main to relics recalling the great work done by Jenner, and these, which have been collected by a Russian, form part of the Russian section. Nowhere in the British sanitary section is any sort of honour rendered to any one of the many Englishmen who, like Jenner, have largely contributed to benefit humanity by initiating some important sanitary reform.

Paris, Oct. 29th.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

The Hospital Sunday Fund.

FOR more than 40 years a special appeal has been made annually at the various places of worship in Birmingham and its suburbs on behalf of the hospitals and allied institutions for the relief of suffering. It has been customary since the movement was started to present the full amount collected to the General Hospital one year, the next year to the Queen's Hospital, and the third to the amalgamated charities, some 16 in number. Sunday, Oct 28th, gave an opportunity of repeating this valuable effort. In spite of adverse weather and so many outside calls upon the pockets of the benevolent it is satisfactory to record a ready response to the appeals made. Up to the present time the amount collected has reached the sum of £4000 odd.

The Hospital Saturday Fund.

A worthy sister of the above movement, one which has exceeded it considerably in dimensions and to some extent in interest also, is the Hospital Saturday Fund. A meeting of the delegates was held on Oct. 23rd when cheques were distributed by the Lord Mayor to the various medical charities participating in the proceeds. It was announced that the collections up to date amounted to £18 204 12*s.* 8*d.*, beating the record of last year by £73. The chairman stated that they would like to increase the amount of the cheques to the various institutions, but that they had other liabilities which had to be met. They had made improvements alone costing £4000 at the Tyn-y-Coed Convalescent Home. The systematic collections made from the manufactories enabled this method to assume large proportions and to be so successful. Cheques amounting to £10,000 were then distributed to different medical charities in proportion to their size and needs and votes of thanks were passed to those who had given so much time and labour to the details connected with the scheme.

The Midland Medical Society.

The inaugural meeting of this society for the session 1900–1901 was held at the Grand Hotel on Oct 26th. A large number of members and visitors assembled to hear an address given by Professor Alexander R. Simpson on the Invention and Evolution of the Midwifery Forceps. As professor of midwifery in the University of Edinburgh and as one having exercised much care to, and shown ingenuity in, the perfection of the axis traction forceps Dr. Simpson spoke as an authority upon the subject. Many of his former pupils joined in the thanks accorded to him at the close of the address, testifying to the interesting and clear manner in which the subject had been placed before them.

The Consultative Medical and Surgical Institution.

No doubt the memory of the formation of this movement and the criticisms connected with it are still fresh in the minds of many of the profession. The first report of the committee was presented at the annual meeting held on Oct. 29th. The institution, it was stated, was established to lessen the strain on hospital charity by providing on terms within, and under conditions suitable to, their pecuniary means and position medical and surgical aid to those who would otherwise seek it gratuitously, or be unduly taxed by paying the usual consultation fees. The committee state that during the 21 weeks which had elapsed since the opening of the consulting rooms in May 222 patients consulted the consulting physician, Dr. H. Ward Irvine, 148 being men and 74 women. The various occupations of the patients are given and the committee go on to say that they consider this result very satisfactory notwithstanding the organised hostility of certain members of the medical profession. They moreover consider that the need for such an institution was both real and widespread. They look forward sanguinely to increased results for the future. When we read further we read that the financial result can hardly be regarded with the same amount of satisfaction, for the income and expenditure account shows a deficiency of £343 13*s.* 6*d.* on the working of the institution to date—that is, 21 weeks. The committee, however, believe that before long the debit balance will disappear and that the institution will become self-supporting.

Oct. 30th.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

Black Smoke.

A STEP forward on suitable lines is being taken by the Salford Corporation in dealing with the smoke nuisance. Everyone knows that manufacturers all over the country pose as martyrs in a good cause—i.e., their own—if any attempt is made to lessen the nuisance which so many of them are busily engaged in producing. But Mr. C. H. Tattersall, the medical officer of health, thinks that there is no necessity for any black smoke, and that the conditions which lead to its prevention are advantageous to the manufacturers. The Health Committee of the corporation have therefore instructed him to issue a circular warning manufacturers and advising them as regards the prevention of black smoke. Deficient boiler accommodation is one of the chief causes of its occurrence, and bad stoking is another. In the former case the Health Committee recommend the use of mechanical appliances which they say are necessary, and state that "if the boiler accommodation is adequate the firemen and not the manufacturers will be prosecuted." The committee wish it to be clearly understood by the manufacturers that "they must either provide adequate boiler accommodation or be responsible for the emission of black smoke." It is stated that in an ordinary Lancashire boiler, 30 feet by seven and a half feet, with a proper draught, the amount of coal used ought not to exceed 20 tons per week where hand-firing obtains. Where this quantity is exceeded mechanical appliances are considered to be necessary. It is also stated that sufficient boiler accommodation together with firing by competent men give the most satisfactory results. The committee will prosecute the firemen, and not their employers, should an offence take place where the boiler accommodation is sufficient. The medical officer of health will be glad to confer with owners or managers of works in the borough as to the abatement of the smoke nuisance. It is quite fair to make the firemen bear their share of responsibility, for in many cases the masters have been at their mercy as regards emission of smoke. These men have thought it less troublesome to throw a quantity of coal

occasionally into the furnace and thus to cause black smoke than to feed the furnace more frequently with less at a time.

The Milk-supply of Manchester.

An interesting and important letter from Dr. H. Ashby on the Manchester milk-supply appeared in the *Manchester Guardian* of Oct. 24th. He says that milk contaminated in the cowshed, in the shop, or in the household, is largely responsible for the infantile diarrhœa and other wasting diseases which swell the high death-rate of infants under a year old in this and other cities, but that condensed or preserved milk is often contaminated in the household and is as likely to give rise to diarrhœa as so-called fresh milk. He does not, however, altogether advocate the use of sterilised milk. The sterilising process destroys the bacteria of the infectious diseases (such as tuberculosis) and the many micro-organisms which get into the milk from the cowsheds and dairies, but it injures the milk as to its nutrient qualities and sterilised milk is not to be compared as a food with clean and pure fresh milk. He is, therefore, in favour of preventing the contamination of milk with bacteria rather than their destruction after they have entered the milk. He cites the experience of the Walker-Gordon Company of New York and London, the Copenhagen Milk Supply Company, and the Manchester Pure Milk Supply Company to show that this can be done. "By the inspection and care of the cows, the most rigid precautions in the handling of the milk in the cowshed and dairy by maintaining the milk at a low temperature, and supplying it ..... in sealed bottles contaminations are avoided and a more wholesome and safer milk can be supplied to the infant than by any sterilising process." A supply of such fresh milk as this in bottles sold at a reasonable rate and, as he significantly adds, "a levelling up of the habits of some of our fellow-citizens," would rapidly lower the infantile mortality. Perhaps the next generation of mothers now being educated in our schools may know that pure milk is more desirable than dirty milk, and that bread-and-butter, potatoes, meat, tea, and gin, are not suitable articles of diet for children under 12 months old. Or is this too much to expect? In a report to be presented to the Lancashire County Council on Nov. 1st Mr. Edward Sergeant, medical officer of health for the county, enforces the necessity of a pure milk-supply, especially with reference to tuberculosis, and he states that 50 per cent. of the cows in the ordinary farmer's shippon suffer from tuberculosis, while "from 1 to 2 per cent. have tuberculous udders secreting milk capable of rendering actively infectious the milk from the healthy cows when mixed with it."

Proposed Hospital for Infectious Diseases.

On Oct. 12th a town's meeting was held to consider the proposal of the Manchester Corporation to erect a hospital for infectious diseases on Carrington Moss, when a vote adverse to the scheme was given. A poll of the ratepayers has been demanded and in the meantime letters are appearing in the local press advocating or opposing the project. Exception is taken in one of the weekly papers to the proposed provision of 240 beds as excessive. It is based on the fact that of late years the cases of small-pox in Manchester have been few, and then follows a fallacious argument as to the effect of improved general sanitation: "Every year the sanitary condition of the city is improving, thanks to Alderman Walton Smith and his colleagues, and the *chief causes of small-pox*—filth, bad air, and crowded dwellings in slum districts in proximity to polluted streams—are in process of being removed." As if filth, bad air, and over-crowding would produce small-pox in the absence of the specific cause. Objection is also taken to the estimate of £60,000 as being much too low, and £100,000 is considered as nearer the sum that would be required. No doubt 240 beds for small-pox cases may be nearer the theoretical standard for the population of Manchester than a smaller number, yet if we bear in mind the rate of spread of small-pox when all possible means of isolation are adopted, as will be the case in Manchester, and the eager way in which even anti-vaccinationists—as long as the disease is at a distance—flock to the medical man on its approach, there is some force in the plea for a smaller permanent hospital. This is all the stronger when it is remembered how rapidly temporary accommodation can be provided when required, if the ground is available and the requisite administrative facilities are ready and sufficiently elastic. As regards the site, it will puzzle the ratepayers or any of their leaders to find a better one than that at Carrington Moss. The neighbourhood of Manchester is so thickly populated that within an equal distance from the centre of the city it is more than doubtful if a piece of land can be acquired, at any cost, presenting so many advantages and so few disadvantages. Carrington Moss already belongs to the corporation, it has very few houses on it, and it fulfils the requirements of the Local Government Board more completely than any other suggested site. Nor does the objection that it has been used as a place of deposit for excreta and refuse apply more strongly than to agricultural land generally. Dr. Dixon Mann went over it some months ago and found no ground for objection; "the air was free from odour and the ground showed no signs of offensive matter." My own experience entirely confirms this. When I last visited the Moss vegetation was luxuriant, the air was sweet, fresh, and bracing, and the whole sweep of about 1200 acres showed the wonderful change that can be effected by energetic and skilful farming which, by the way, has not been unprofitable. The objectors on this score should read Dr. Vivian Poore's experiments.

Christmas Beer in the Workhouse.

As the day approaches on which we commemorate the announcement of the message of peace and goodwill the various boards of guardians have a contention as to whether those under their care are or are not to have any Christmas beer. The house visiting committee of the Chorlton Board of Guardians at their meeting on Oct. 26th recommended that beer should be supplied as usual to the inmates of the Withington workhouse with their Christmas dinner. An amendment, proposed by one lady guardian and seconded by another, that the question should be referred back to the committee was rejected. At the meeting of the Prestwich Board of Guardians on Oct. 25th a long discussion was introduced by a lady guardian who moved that the practice of giving beer on Christmas Day should be discontinued. This was seconded but lost, so that the Prestwich inmates will have their beer if they wish. But they have the choice of beer or milk, and many are said to prefer the latter. Reason and moral considerations, arising chiefly from alcoholic abuse and its consequences, point in one direction, while sentimental regard for old-time customs, when some form of alcohol was thought an absolute necessary of life and the essence of good cheer, points in the other and is generally followed.

Appointments.

Dr. Robert B. Wild has been elected an honorary physician to the Cancer Pavilion and Home in succession to the late Professor D. J. Leech.—On Oct. 22nd at the meeting of the special committee of the trustees of the Manchester Infirmary for the appointment of honorary surgeons, Mr. W. P. Montgomery, M.A. Oxon., B.S., M.B. Lond., F.R.C.S. Eng., was appointed honorary assistant surgeon to fill the vacancy caused by the appointment of Mr. W. Thorburn as full surgeon.

Oct. 30th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Opening of the Diamond Jubilee Pavilion of the Edinburgh Royal Infirmary by Princess Henry of Battenberg.

ON the afternoon of Oct. 26th the ceremony of opening the new pavilion of the Edinburgh Royal Infirmary was performed by H.R.H. Princess Henry of Battenberg. The Princess, who was the guest of the Duke and Duchess of Buccleuch at Dalkeith Palace, drove into Edinburgh by the Cameron Toll, the old Dalkeith-road, Preston-street, and Nicholson-street. After lunching with the Lord Provost in Charlotte square Her Royal Highness proceeded to the infirmary by way of Princes-street and the Mound, all traffic being stopped along the route. A large number of tickets of admission to the infirmary had been distributed, so that the corridors along which the Princess was to pass were lined by persons anxious to see Her Royal Highness, while in the middle ward of the new pavilion sitting accommodation had been provided for holders of special tickets. After performing the ceremony of opening the outer door of this ward with a gold key, the Princess, attended by the managers and senior members of the hospital staff, walked through the ward to

the south end, where a small platform had been erected. The Rev. Dr. Archibald Scott then opened the proceedings with prayer, after which the Lord Provost made an appropriate speech referring to the history of the Edinburgh Royal Infirmary and the principles on which it was worked, as well as to the persons by whose generosity it had been made possible for the managers to erect the new pavilion. The Lord Provost subsequently presented the key to Her Royal Highness, who then declared the building open. Professor Rankine in a short speech proposed a hearty tribute of thanks to the Princess for her services in having opened the pavilion, after which Her Royal Highness left the ward. After spending a short time in the institution the Princess and party drove back to Dalkeith, where Her Royal Highness spent the night, leaving for the north early on the morning of Oct. 27th.

The Diamond Jubilee Pavilion is to be especially devoted to the treatment of gynæcological cases. About half of the cost of the pavilion will be defrayed from the Diamond Jubilee Fund raised by the citizens of Edinburgh in 1897. Nine-tenths of the fund, amounting to £19,178 7*s.* 11*d.*, were given to the treasurer of the Royal Infirmary for this purpose. The whole cost of the pavilion will amount to about £40,000, the additional £20,000 being provided out of funds reserved for purposes of extension. The new pavilion stands immediately to the west of the medical pavilions on ground purchased by the managers from the directors of the Edinburgh Royal Hospital for Sick Children. The style of architecture is similar to that of the previously existing pavilions. The new pavilion, however, is larger than these, and being built of red stone has quite a distinctive character. The building is five storeys high, containing a basement floor, three floors of wards, and attics. At the south end are octagonal turrets rising to the height of 95 feet. Between the turrets are open balconies, and on one of these balconies is a granite memorial stone with an inscription as follows:—"Dedicated to the glory of God and the healing of human suffering in commemoration of the sixtieth anniversary of the accession to the Throne of Her Most Gracious Majesty Queen Victoria: the thank-offering of many for great benefits bestowed upon the realm during her reign." At the north-east angle of the pavilion there is a large square tower within which is the staircase which measures 20 feet by 30 feet, and in the upper part there are electric fans for the ventilation of the building. The basement floor contains the new bathing establishment. This contains a Turkish bath with three hot rooms graduated in temperature, a douche room, and vapour, needle, sulphur, electric, and other medicated baths. The cooling-room measures 70 feet by 10 feet, and there is ample provision for dressing-rooms, lavatories, and attendants' rooms. All the rooms connected with the bathing department are tiled both as to the floor and the walls, while between this department and the wards above there is a strong double concrete floor with intermediate ventilated air space which is intended to prevent the heat from the baths penetrating to the wards above. The new pavilion is connected with the main buildings of the infirmary by a covered corridor on the ground floor and by an open gallery on the first floor. The pavilion is provided with three lifts—for patients, food, and coals respectively.

The ward on the ground floor is intended for a reserve medical ward, to be used when any other ward in the medical hospital is being cleaned. The wards on the first floor and second floor are for gynæcological cases and will be under the care respectively of Professor A. R. Simpson and Dr. J. Halliday Croom. On these floors, in addition to the main ward, are an operating-room, two special wards of two beds each, a demonstration or lecture room, an out-patients' room, and a physicians' room, as well as the ward kitchen, bathroom, lavatories, an isolation ward with one bed, nurses' bedrooms and parlour, linen stores, &c. The operating rooms have been tiled throughout. The walls of the pavilions are not strapped and lathed, but the plaster is laid on a brick lining separated from the outer wall by an air space. The floors are of iron and concrete and the floor boards are nailed to a layer of asphalt laid on concrete. The attic floor contains 14 single rooms for 14 nurses and seven rooms for servants, besides ample lavatory, bathroom, and boxroom accommodation. For heating the pavilion steam pipes and radiators will be used and in each ward there will be an open fireplace. The ventilation will be by means of electric fans placed in the tower in the north-east corner. Between this pavilion and the new laundry on the north there are being erected two buildings of smaller size—one for the treatment of diseases of the ear and throat, the other for diseases of the eye. The kitchen is also at present being much enlarged and improved at a cost of about £6000. Several storerooms have been taken into the old kitchen and the building has been doubled in height. It is tiled from floor to ceiling and is lined with new kitchen "plant" in the shape of boilers and ovens, from the size of which one feels assured that the quantity of food supplied to the inmates of the infirmary will always be satisfactory. It is 30 years ago since the Prince of Wales laid the foundation-stone of the present buildings of the Edinburgh Royal Infirmary, and by this time not far short of half a million of money has been spent on the land, buildings, equipment, and enlargement of the institution which is now one of the largest hospitals in the country.

Dr. J. O. Affleck's Retirement from the Edinburgh Royal Infirmary.

A few weeks ago Dr. J. O. Affleck's term of office as an ordinary physician came to an end, the vacancy on the staff of the full physicians being filled by the promotion of Dr. G. A. Gibson to be a full physician. The managers of the infirmary at a meeting held recently adopted the following minute:—

Dr. Muirhead, convener of the medical managers' committee, directed the attention of the board to the recent expiry of Dr. J. O. Affleck's appointment as an ordinary physician, and on his motion it was unanimously agreed to appoint Dr. Affleck one of the consulting physicians to the institution and to minute that fact in the following terms:—It is always with much regret that the managers feel themselves periodically called upon to take leave of one of their medical staff on the expiry of his term of office. In no instance have they experienced this feeling more genuinely than in the case of Dr. Affleck, for never has any physician performed his duties with more untiring zeal, with greater conscientiousness, and truer fidelity than he. And this same earnest devotion he has carried with him both as physician and teacher, in all his ministrations to the nurses, which he has for so long ungrudgingly and tenderly bestowed upon them. In recognition of these duties, so faithfully performed for the long period of 15 years, the managers have pleasure in appointing Dr. Affleck one of the consulting physicians to the infirmary, and they desire to assure him that they value very highly the skill and devotion he has ever bestowed upon the health and welfare of the patients as well as of the nurses. They wish him long-continued success in his private practice, and they feel sure that the pleasing reflection that he has been instrumental in saving many lives and alleviating the sufferings of hundreds of others cannot fail to prove a source of much comfort and eminent satisfaction to him in his retirement from the active work of the infirmary.

Oct. 30th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Royal University of Ireland.

THE meeting of Convocation of the Royal University of Ireland which was held in Dublin on Oct. 25th has, I regret to say, given rise to the utmost dissatisfaction to the great majority of graduates who were present. The principal business at the meeting was the election of a clerk of Convocation (at a salary of £100 per annum), and for this post there were five candidates: (1) Mr. W. H. Brown, M.A., LL.B.; (2) Mr. John Donaldson, M.A.; (3) Mr. Charles F. Doyle, M.A.; (4) Mr. James C. Meredith, M.A.; and (5) Mr. W. J. White, M.A. Lord Morris (Vice-Chancellor) presided, and the small room in which the meeting was held was crowded with the supporters of the candidates who had come great distances to vote, as personal, not proxy, voting alone is allowed. The first point to be discussed was as to the mode of election, but most unfortunately a show of hands was allowed and this indicated very early in the proceedings the following of the various candidates. It was argued by His Honour Judge Shaw, M.A., that an exhaustive process of voting should be employed with the object of securing that the choice of the majority present should be eventually adopted. In other words, his advice was to put up all the candidates (each voter to record his vote for one) and after every time of voting to cut off the lowest on the poll until eventually the choice would lie between two. The Roman Catholic Bishop of Limerick urged that the proper plan was simply to take a show of hands and to declare the candidate with the largest number of votes elected. Serjeant Dodd, Q.C., suggested the method adopted by the Benchers of King's Inn, which would, in the end, practically give the majority of those present

the right of selection. To the great surprise of the majority present the Vice-Chancellor (Lord Morris) decided in favour of a show of hands. There was, he said, no rule of Convocation directly bearing on the subject, but he thought that there was one bearing on it indirectly—viz., that the first mode of election should be presented by a show of hands. After the show of hands, if no poll was called for, the man having the greatest number of hands held up for him would be entitled to be declared elected. One of the candidates (Mr. White) having withdrawn his nomination and a show of hands having been taken on behalf of the four remaining, a poll was called for with the following result:—Doyle, 46; Meredith, 45; Brown, 35; and Donaldson, 25. Lord Morris then declared Mr. Doyle duly elected.

Royal College of Surgeons in Ireland.

There are at present two candidates for the Vice-Presidency of the Royal College of Surgeons in Ireland: Dr. John J. Cranny and Mr. Arthur Chance. Dr. Cranny has addressed a circular letter to the Fellows of the College in which he asks them not to attribute to negligence his omission to canvass individual Fellows but to his "deep conviction that the practice is improper." He further goes on to say: "It appears to me that the Vice-Presidency should be an annual office and this was the intention of the College when the biennial Presidency was agreed to. As matters are now one gentleman holds office for four years, thus excluding a great many who are naturally anxious to become Vice-Presidents and who may not ambition the higher dignity."

Election of Workhouse Medical Officer.

The rather valuable appointment of medical officer to the Longford Workhouse, vacant by the death of Mr. R. S. Cochrane, has just been filled by the election of Mr. Francis J. Macguire, who has resigned his position of medical officer to the Killashee Dispensary District.

The Belfast Medical School and the Royal University of Ireland.

At the recent autumn examinations of the Royal University of Ireland the candidates from Belfast gained a large number of distinctions. Mr. Robert Allen, M.B., of Queen's College, Belfast, was awarded a medical studentship in pathology; Mr. R. A. L. Graham, M.B., obtained the Stuart Scholarship in mental science. At the M.B. examination all the honours were awarded to Belfast students, Mr. J. C. Rankin obtaining a first class and a £40 exhibition; Mr. H. B. Steen obtained a second class together with Mr. J. H. Reford, B.A., and the former gained a £25 exhibition; of the seven candidates in the upper pass division four were from Belfast; and of the total number of students who passed the final M.B. examination (25 out of 36 candidates) 13 came from Belfast, while two others studied there as well as at Galway. At the Second Examination in Medicine Mr. Thomas Lyle obtained the only first-class with an exhibition of £35, and he was awarded the Stewart's Scholarship in Medicine; Mr. J. C. McPherson obtained a second-class at the same examination. At the Third Examination in Medicine Mr. Henry M. Johnston obtained the only first-class and also a £30 exhibition. By far the majority of exhibitions and honours in the medical examinations of the Royal University were gained by students of the Belfast School of Medicine.

Belfast Guardians and the Workhouse.

In reply to the very condemnatory report of Mr. Agnew, inspector of the Local Government Board, on the condition of the Belfast workhouse a report in reply was submitted to the guardians at their meeting on Oct. 23rd. It was the outcome of a special meeting of the board in committee on Oct. 22nd. In this document attempts are made to meet the very serious allegations of Mr. Agnew and, in conclusion, it is urged that the Local Government Board should place the departments of the workhouse in which the sick are treated under the charge of a medical inspector who is specially qualified to confer with the medical officers, and to make special recommendations to the guardians for the better treatment of the sick where required. The report was passed by 14 to five.

The Royal Victoria Hospital, Belfast.

At a meeting of the board of management of the Royal Victoria Hospital held on Oct. 27th Dr. H. L. McKisack was appointed physician in place of the late Dr. R. S. Smith, and Dr. W. B. McQuitty was appointed assistant physician. Dr. A. B. Mitchell was advanced to the full surgeonship in room of Dr. H. O'Neill (resigned), and Mr. Robert Campbell was appointed assistant surgeon in the office vacated by the promotion of Dr. Mitchell. Mr. Campbell having resigned the office of surgical registrar the post will be filled up by the medical and surgical staff next month and most excellent candidates—old students of the school—are in the field. The staff have decided to appoint anæsthetists on two grounds: (1) in the interests of the patients and (2) that, as was pointed out in a leading article in THE LANCET of Oct. 27th, students may really get some practical knowledge in the administration of chloroform, ether, &c. For the posts of resident pupils, of which four were vacant, there was a very keen competition, 10 students presenting themselves, and the following were selected on Oct. 26th: Mr. McCrea, Mr. Ferris, Mr. Logan, and Mr. Armstrong. Dr. J. C. Rankin has been elected house surgeon, vice Dr. J. W. West (appointed to a commission in the Royal Army Medical Corps). Never were the staff more enthusiastic in teaching and the great success of the Belfast School at the recent examinations of the Royal University has proved a most healthy stimulus to all the professors and clinical teachers.

The Belfast Charitable Society.

Dr. W. Calwell has been appointed consulting physician to the Belfast Charitable Society in place of the late Dr. R. S. Smith.

The Queen's College, Belfast, Students' Union.

A meeting of the members of the Students' Union Society of Queen's College, Belfast, was held in the building of that institution on Oct. 29th to consider what steps should be taken towards raising sufficient money to meet the cost of present and prospective necessary improvements. It was decided, after some discussion, to hold a small bazaar in the union, by which it is expected the required money will be most easily raised.

Oct. 30th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

The Sale of Morphia by Pharmaceutical Chemists without a Medical Prescription.

THE Council of the Medical Association of the Seine has recently had this important matter under consideration. In spite of the various police regulations forbidding pharmaceutical chemists to sell medicaments without a prescription most of them are in the habit of shamelessly breaking the rules. The tolerance which was formerly extended to the sale of certain anodyne drugs in common use has now been taken as applying to a regular crowd of medicinal preparations. The unprecedented development of "specialties" in France has contributed greatly to the present state of matters, so that there is no one drug which has not been worked up into a specialty, and they are all sold without a prescription. Nux vomica, aconite, opium, and digitalis are prohibited from being sold except through a prescription, but anyone can obtain at once from the pharmaceutical chemist specialties of which these poisons are openly acknowledged to form the basis. It is not too much to say that in most of the Paris pharmacies of the present day the majority of customers buy things without any prescription at all. In many cases they come in simply to ask the pharmacist for "something for a cough, or for palpitation of the heart, or for pains in the stomach," especially in the poorer quarters, and the pharmacist without the slightest hesitation gives them a "bottle" or some pills. Very often these are "his own preparations" or else a lucrative forgery of some approved specialty, which forgery could only be sold in this way, for no medical man prescribes or even knows it. It is needless to say how such conduct prejudices the medical men residing in the neighbourhood. Unfortunately it is very difficult to put a stop to these dangerous practices. Medical men rarely have the courage to bring a charge, and even if a conviction is obtained the punishment which the courts inflict is most inadequate and altogether disproportionate to

the income which the pharmacist draws from his most objectionable industry, while the medical man has from henceforth an implacable enemy in the pharmacist who manages completely to wean his patients from him. However, the Medical Association of the Seine, which has before now done the profession a number of signal services, is going to bring an action against a pharmacist for selling morphia without a prescription for the same. The association has a very good case, for there is no doubt as to the law upon this point and the dangers resulting from the illicit sale of morphia are quite enough to make the magistrates exercise severity in its repression. As a matter of fact a pharmacist has just been sentenced to a term of eight days' imprisonment and a fine of 1000 francs for having been in the habit of selling morphia to a lady without a physician's prescription and without entering the sale in a book according to the law regulating the sale of poisons. In this case M. Duchesne suggested to the Medical Association of the Seine that those medical men who lived in the same district as the pharmacist should boycott him as well as those who were in the habit of counter prescribing. One member of the association expressed the fear that such boycotting on the part of medical men would expose them to the risk of an action on the part of the pharmacists, but M. Duchesne soothed these fears by relating the following cases. The first was that of a pharmacist in the tenth *arrondissement*. The medical men in the same district recommended their patients not to go to him on account of the very inferior quality of the drugs supplied by him. The pharmacist brought an action, lost his case, and three months later had to shut up shop. The other case showed how at Saint-Mandé a medical man was summoned by a pharmacist for having recommended patients not to go to him, giving at the same time reasons for his advice. Not only was the medical man acquitted, but the court in giving judgment added that in any similar case it would be the duty of the medical man to warn his patients against dispensing establishments where prescriptions were incorrectly made up (*officines incorrectes*) and also against the reprehensible practices of pharmacists. M. Duchesne carried his proposition by the unanimous vote of the Council and the medical men of the *arrondissement* concerned have all been advised of the decision by a special letter.

The Cellular Diagnosis of Tuberculous Meningitis.

M. Widal, M. Sicard, and M. Ravaut laid before the Society of Biology at the meeting held on Oct. 13th an account of researches made by themselves into the histology of the serous effusions which occur in cerebro-spinal meningitis and in tuberculous meningitis. The methods employed were the same as used by them in their researches upon pleurisy. Normal cerebro-spinal fluid contains no morphological elements. In acute diseases, such as typhoid fever, acute phthisis, Buhl's disease,[1] morbus cordis with anasarca, and in various nervous diseases such as general paralysis, disseminated sclerosis, hemiplegia, chronic chorea, and cervical caries, the cerebro-spinal fluid still contains no cells. In the fluid from cases of acute meningitis, however, the observer may see various morphological elements. In 12 cases of tuberculous meningitis, the diagnosis being verified by a post-mortem examination and the disease having occurred in patients of different ages, lymphocytes were numerous. In two cases red blood cells predominated; in four cases there were a few polynuclear elements; injection of the fluid, however, never produced a secondary infection. In two cases of cerebro-spinal meningitis the polynuclear elements were more numerous than the lymphocytes and that to a very marked degree. Lymphocytosis is therefore characteristic of the effusion of tuberculous meningitis.

Oct. 30th.

SWITZERLAND.

(FROM OUR OWN CORRESPONDENT.)

Leprosy in Switzerland.

THE attention of the Zürich sanitary authorities was recently attracted by a private communication to the fact that a man probably suffering from leprosy was on his way from Brazil to Zürich to consult a Swiss practitioner who, discarding drugs as poison, makes a therapeutic speciality of vegetarianism and hydro-therapeutics. The man when he arrived at Zürich with his family was immediately sent to the Medical Clinic and there isolated. The case, as demonstrated by Professor Eichhorst, proved to be one of *lepra cutanea sive tuberosa* localised in the inner and outer nose, pharynx, and the epididymis, which were enlarged and hardened; a small thickening of the cartilage of one ear was also suspicious as was pigmentation of the dorsum of one foot. The eyebrows and eyelashes were wanting, as in many similar cases. The almost certain clinical diagnosis could be confirmed by the bacteriological diagnosis, as numerous bacilli of lepra could be demonstrated from mucus removed from the nose. The sanitary authorities in Switzerland have no wish to detain such patients except in isolation.

A Remarkable Weapon.

At a meeting of the Zürich Medical Society on Nov. 27th Professor Krönlein demonstrated a pistol which is creating quite a stir in army circles. A man who shot himself with this weapon, a "selbstlade-pistole (self-loading pistol), fabrick Mauser, modification Bergmann," was admitted to the Surgical Clinique with a perforated skull and died soon after. The necropsy revealed a most extraordinary power of destruction in the bullet, there being quite a network of fissures in the skull, besides the small wounds of entrance and exit. Professor von Bruns of Tübingen made experiments on the dead subject with the original Mauser pistol three years ago, and the German army authorities intend to introduce this destructive weapon into the army. The Swiss army authorities have not yet come to a final decision. The weapon is very light, has a light but strong leather case, into which the weapon can be so fixed that it serves as a short gun, which greatly facilitates taking aim. The weapon is remarkable from its simplicity of construction and want of screws. The projectile has a diameter of 7·6 millimetres and the velocity on firing is 450 metres, or 482 yards; the velocity after the bullet has reached a distance of 1000 metres, or 1093·6 yards, is still 120 metres, or 130 yards. The simplicity of loading is such that 120 shots can be fired in one minute. It seems a weapon admirably adapted for cavalry forces and mounted infantry.

Zürich, Oct. 29th.

ROME.

(FROM OUR OWN CORRESPONDENT.)

Notification of Infectious Diseases.

IN connexion with the question of the notification of plague discussed in recent numbers of THE LANCET, it might prove useful to compare the regulations in force in Britain as to the notification of infectious diseases with those in other countries. Here, for example, is the municipal enactment on this subject for the city of Rome:—

> Physicians, surgeons, and midwives who treat or assist patients with small-pox, malignant pustule, measles, scarlatina, enteric fever, typhus, diphtheria, croup, whooping-cough, puerperal fever, cholera, dysentery, or other disease which is contagious or suspected to be so, as well as cases of hydrophobia or of syphilis transmitted by a hired wet-nurse, are required to give immediate notice of such to the Municipal Bureau of Hygiene.

I think that I am right in saying that in ordinary circumstances and for the less serious of the maladies enumerated above the letter of this law is generally disregarded by medical men here, in as far as the reporting of cases which are only *suspected* of being infectious is concerned. In times of any alarming epidemic, however, the advantage of such a clause is obvious, leading as it doubtless does to a speedier isolation of infected cases and so removing a load of responsibility from the shoulders of the ordinary practitioner, who may, moreover, be trusted not unnecessarily to avail himself of its provision. It will be noticed, by the way, that the list of notifiable diseases includes measles and, indeed, any infectious complaint however unimportant, but as no fee is allowed in Italy for notification no expense is thereby incurred, and the authorities usually take no action upon the information so obtained, unless for some special reason—as, for instance, in the case of measles where an outbreak is of a virulent character. Further, it may be added that an exception is made for cases

[1] Icterus in new-born children.

of tuberculosis to the extent that they are only notifiable when occurring in educational institutions, boarding schools, asylums, and hospitals, unless they are cases which terminate fatally, when they must be notified wherever they occur.
Oct. 29th.

NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

The Massachusetts Arsenic Law.

THE Massachusetts State Board of Health has secured an Act fixing severe penalties with regard to the use of arsenic in fabrics. The law as approved on May 18th becomes operative on Jan. 1st, 1901, and places the power in the hands of the State Board of Health. The Act provides that any corporation, firm, or agent, who directly or by an agent manufactures, sells, exchanges, or has in his custody or possession with intent to sell or exchange any woven fabric or paper containing arsenic in any form or any article of dress or of household use composed wholly or in part of such woven fabric or paper, shall on conviction thereof be punished by a fine of not less than $50 or more than $200; provided, however, that the section shall not apply to dress goods or articles of dress containing not more than $\frac{1}{100}$th of a grain, or to other articles or materials containing not more than $\frac{1}{10}$th of a grain of arsenic per square yard of the material. The State Board of Health shall make all necessary investigations as to the existence of arsenic in the material and articles mentioned in Section 1 of the Act and may employ inspectors and chemists for that purpose, and shall adopt such measures as they may deem necessary to carry out the provisions and to facilitate the enforcement of the Act.

Visual Defect and Railroad Service.

In order to ascertain what is being done in railroad circles in matters of this nature Professor Allport sent a letter of inquiry and a question blank to every railroad company in the United States, Canada, and Mexico, operating over 100 miles of road. 244 railroad companies were thus addressed, whose operations covered 205,386 miles of road. Professor Allport received replies from 64 companies whose operations extended over 90,950 miles of road, and he found that 53 of these exacted a systematic eye and ear examination of some kind. These examinations are undoubtedly not at all ideal in many instances, but they show that interest is taken in the matter. As to what men are subjected to such examinations the replies are differently couched, but it is evident that at least 50 of the companies require such examinations of all men directly engaged in moving and operating trains and in giving and receiving signals, such as engineers firemen, conductors, brakesmen, yardmen, signalmen, switchmen, &c. These examinations are made exclusively by the surgeons of the companies in 19 cases; 18 companies entrust the work to an employé, such as a division superintendent, train master, &c. Six companies send doubtful cases to an eye and ear surgeon; nine companies entrust the whole matter to a regularly employed eye and ear surgeon; and three companies first have the men examined by their surgeons who then send doubtful cases to the eye and ear surgeons. Three of these companies cause examinations to be made in all cases by surgeons of relief associations. One company has re-examinations every six months, four every year, 14 every two years, four every three years, and two every four years. Eight re-examine whenever it seems advisable, as after severe illness or injury, or after a railway accident, or when certain incidents bring into question the reliability of the eyes or ears of an employé. One company requires re-examinations only at times of promotion, and another when a man arrives at the age of 50 years. On 23 railroads it is claimed that perfect eyes and ears are required of new men, and that no concessions whatever are made to old employés. On 16 of the railroads, while perfect sight and hearing are required of new men, various reasonable concessions are made to old employés. On one railroad the following requirements are made: engineers and firemen shall possess a vision of $\frac{2}{3}$ in one eye, and $\frac{2}{20}$ in the other. Conductors, flagmen, brakesmen, and switchmen must have a vision of $\frac{2}{3}$ in one eye and $\frac{2}{10}$ in the other; other employés must have a vision equalling $\frac{2}{10}$ in both eyes. On one railroad the applicant must possess eyes and ears the functions of which shall equal 75 per cent. of the normal function. One company requires perfect eyes and ears for firemen and all the employés to possess vision equalling $\frac{2}{10}$ in one eye and $\frac{2}{10}$ in the other. Another company sets the standard of vision at $\frac{2}{10}$ and declares that a whisper must be heard at a distance of 12 feet. One company requires a combined vision of $\frac{2}{3}$ and that neither eye shall drop below $\frac{2}{5}$, while another requires of engineers, firemen, signal-tower men, and switchmen vision of $\frac{2}{3}$ in one eye and $\frac{2}{5}$ in the other. Upon two railroads employés are retained who still possess vision equalling $\frac{2}{10}$ in both eyes and when the hearing is half lost in one ear, provided the other ear be perfect. Seven companies specifically state that old employés may wear distance glasses, if these will enable them to reach the proper standard; seven others especially state that they do not allow distance glasses during train duty when such glasses are necessary to bring vision up to the proper standard. It appears that on all points bearing upon the visual and aural capacity of railroad employés there is much diversity of opinion on the part of the employer and the employed and also on the part of railroad surgeons and eye and ear surgeons themselves. This is unfortunate, as it precludes the probability of meeting on mutual ground and formulating rules that shall be safe and yet not extreme or Quixotic.

Charitable Hospitals not Liable.

The United States Circuit Court lays down the rule that a beneficiary of a charitable corporation—as, for example, a patient in a hospital which is chartered or must be legally classed as a charitable institution—must take its bounty for what it is worth. It is inconsistent with the underlying idea of charities, as recognised by law, to hold that the same rule that applies to a person or an institution employed for compensation to do a certain service applies to the distribution of charity. The person who enters a charitable hospital is not a contractor; neither is the hospital a contractor with that person. The person who enters is a mere licensee, like a guest who enters a person's house and who must take the service as he finds it. He cannot have higher rights than members of the household of which he has for the time being become as it were a part. All he is entitled to is not to be led into a danger known to his host and not known or not reasonably apparent to himself. That, the court holds, is the precise rule that applies to a public charity, and in this respect it holds that private charity and public charity rest on exactly the same ground and there is no basis in either case to hold that the person who receives the bounty is a contractor, a person contracting for service as he engages service when he ordinarily employs a surgeon. He is in law only a licensee. Nor does the court consider that the reception—the frequent reception—of money from patients changes the nature of the institution; and the following out of this proposition, it says, necessarily leads to the conclusion that the reception of money from any particular patient does not change the nature of the service rendered to that patient, so far as anything said here is concerned. It looks at the money paid in such a case as a proper contribution to a charity on the part of the person who makes the payment and who receives the benefit of the charity. It is not compensation in the eye of the law. Furthermore, the court holds that the officers of a charitable institution have no power by contract to impose any liability beyond that which the law raises. If it is unsuitably or carelessly managed the remedy is in the hands of the State. So, for the reasons adduced, it holds the hospital in the case in which the above judgment was delivered not liable for an injury alleged to have occurred to a patient through the neglect of a nurse even in the case of a "pay patient," it being in law a charitable corporation.

The Health of the Army.

From the report of Surgeon-General Sternberg it appears that during the calendar year 1899 there were 229,885 admissions to sick report recorded in a mean strength of 105,546 regulars and volunteers. This is equivalent to a rate of 2187·06 per 1000 of strength, as compared with 2146·18 per 1000 during the year 1898, and with 1237·24, the mean annual rate for the decade 1888–1897. The deaths in 1899 amounted to 1945, equal to a rate of 18·43 per 1000, as contrasted with 27·99 during the year 1898, and with 6·69, the mean of the preceding decade. The principal causes of death and the rates per 1000 men contributed by them were: gunshot wounds, 5·10; other injuries, 1·57;

typhoid fever, 2·44; diarrhœal diseases, 2·14; malarial diseases, 0·99; pneumonia, 0·94; and variola, 0·80. The troops serving in Cuba had the highest rate of admission—2949·74 per 1000, as against 3413·54 per 1000 in 1898, the result of exposures during the active service of the Santiago campaign. The lowest admission-rate during the last year, 1677·51, per 1000 was given by troops serving in the United States. The highest death-rate during the last year, 30·58 per 1000 men, was reported from the Pacific Islands. One-half of this was caused by injuries, gunshot injuries being responsible for the deaths of 12·60 men per 1000 of strength. The highest death-rate in 1898 per 1000 was reported from Cuba; of this rate 67·94 deaths were caused by disease and 26·61 by injury, gunshot wounds being responsible for the deaths of 21·69 men per 1000 of strength. Surgeon-General Sternberg in his annual report gives authoritative data which controvert the statements made as to an alarming condition of health among the soldiers on active service. The exposures, fatigues, and excitements of a prolonged campaign are responsible for the large sick report and the relatively large death-rate among the troops in the Philippines, and the opinion is prevalent among medical officers that in time of peace, when only garrison duty would be performed, the sick-rate of the army in these islands would be no higher than it ordinarily is in the United States.

Pan-American Congress.

The third Pan-American Congress will be held in Havana, Cuba, on Dec. 26th, 27th, 28th, and 29th, 1900. The Executive Committee is constituted as follows:—President: Dr. Juan Santos Fernandez. Vice-President: Dr. Gustavo Lopez. Treasurer: Dr. Enrique Acosta. Secretary: Dr. Tomasso V. Coronalo. Members of Committee: Dr. Vincente B. Valdes, Dr. Jose J. Torralbas, and Dr. Eduardo F. Pla. The official languages of the Congress will be English, French, Spanish, and Portuguese. The sections will be as follows: (1) General Medicine; (2) General Surgery; (3) Military Medicine and Surgery; (4) Obstetrics; (5) Gynæcology and Abdominal Surgery; (6) Therapeutics; (7) Anatomy; (8) Physiology; (9) Pediatrics; (10) Pathology; (11) Ophthalmology; (12) Laryngology and Rhinology; (13) Otology; (14) Dermatology and Syphilography; (15 and 16) General Hygiene and Quarantine; (17) Orthopædic Surgery; (18) Mental and Nervous Diseases; (19) Mental and Buccal Surgery; (20) Medical Pedagogy; (21) Medical Jurisprudence; and (22) Railway Surgery.

Oct. 18th.

Medical News.

FOREIGN UNIVERSITY INTELLIGENCE.—*Athens:* Dr. Alivisatos has been appointed Assistant Professor of External Pathology.—*Berlin:* Dr. Moritz Litten has been appointed Extraordinary Professor of Internal Medicine.—*Bologna:* Dr. B. Nigrisoli has been recognised as *privat-docent* of Surgery.—*Breslau:* Dr. Alfred Schaper has been appointed Extraordinary Professor of Anatomy in succession to the late Professor Born. He was formerly Professor of Microscopical Anatomy and Embryology in Harvard University. He is to have charge of the Embryological Department of the Anatomical Institute. Dr. Thiemich has been recognised as *privat-docent* of Children's Diseases.—*Brussels:* Dr. de Boeck has been appointed Extraordinary Professor of Psychiatry.—*Budapest:* Dr. von Korányi has been appointed Extraordinary Professor of Internal Medicine and Dr. E. von Grósz Extraordinary Professor of Ophthalmology.—*Buffalo, U.S.A.:* Dr. Frederick Bush has been appointed to the chair of Physiology in succession to Dr. Pohlman.—*Christiania:* Dr. Harbitz has been appointed to the chair of Physiology.—*Copenhagen:* Dr. Bock has been appointed to the chair of Pharmacology.—*Florence:* Dr. Angelo Nannotti of Sienna has been recognised as *privat-docent* of Surgical Pathology.—*Freiburg (Baden):* Dr. Antenrieth has been appointed Extraordinary Professor of Medical Chemistry.—*Freiburg (Switzerland):* Dr. Charles Dbéré has been appointed Professor of Physiology.—*Göttingen:* Dr. Meissner, Director of the Physiological Institute, has intimated his intention of retiring at the end of the current session. The title of Professor has been granted to Dr. Ludwig Aschoff and Dr. Rudolph Beneke, *privat-docenten* of Pathological Anatomy.—*Halle:* Dr. Paul Eisler has been appointed Extraordinary Professor of Anatomy and Dr. von Herff Extraordinary Professor of Midwifery and Gynæcology.—*Heidelberg:* Dr. Albrecht Kossel of Marburg has been appointed to the chair of Physiology in succession to the late Professor W. Kühne.—*Kharkoff:* Dr. Sokoloff of Moscow has been appointed to the chair of Surgical Pathology.—*Naples:* Dr. C. Addario of Catania has been recognised as *privat-docent* of Ophthalmology.—*Parma:* Dr. Vittorio Mibelli, Extraordinary Professor of Dermatology, has been appointed Ordinary Professor.—*Pisa:* Dr. Cesare Paderi has been recognised as *privat-docent* of Materia Medica and Pharmacology.—*Prague (German University):* Dr. Friedrich Weleminsky has been recognised as *privat-docent* of Hygiene.—*Rio de Janeiro:* Dr. A. Bittencoust has been appointed Professor of Medical Physics and Organic Chemistry.—*Vienna:* Dr. Julius von Hochenegg has been entrusted with the duties of the late Professor Albert's chair of Surgery until a new appointment can be made; Dr. Jakob Pal has been appointed Extraordinary Professor of Internal Medicine; Dr. Emil Redlich, Extraordinary Professor of Neurology; Dr. Salomon Ehrmann Extraordinary Professor of Dermatology; and Dr. A. Elsching and Dr. L. Königstein Extraordinary Professors of Ophthalmology.

VACCINATION IN GLOUCESTER.—At the meeting of the Gloucester Board of Guardians held on Oct. 23rd it was decided to forward to the Local Government Board full particulars respecting the continued neglect of the vaccination officers to carry out the order of the Local Government Board. It was stated that in 1898 out of 1600 births there were between 200 and 300 vaccinations, and in 1899 there were 700 vaccinations, but since then, owing to the loose manner in which the Act was administered, the number had greatly diminished.

VIBRONA ART SERIES.—We have received copies of Nos. 5 and 6 of this series. The pictures selected for reproduction are Rosa Bonheur's "Horse Fair" and Constable's "Hay Wain," both of which magnificent works hang in the National Gallery. The reproductions are issued at the nominal price of 2*s.* 6*d.*, and, as we have already observed when referring to two previous pictures of the series in our issue of May 26th, are free from any advertisement. Messrs. Fletcher, Fletcher, and Co. in giving the public a chance of securing these really artistic reproductions in sepia of some of the finest national pictures are doing a practical service to art.

UNIVERSITY OF CAMBRIDGE.—The Vice-Chancellor announces that he has received from Mr. W. W. Astor the munificent donation of £10,000 for the University Benefaction Fund. This will greatly aid in the erection of the building for botany and for pathology and medicine, the plans of which have already been approved by the Senate. Dr. Haddon, F.R.S., has been appointed university lecturer in ethnology and Mr. J. J. Lister, F.R.S., university demonstrator in comparative anatomy. A university lectureship in physics is vacant by the resignation of Professor Wilberforce, now of Liverpool. The Mater Misericordiæ Hospital, Dublin, has been recognised by the Special Board for Medicine as a place of clinical study. At the congregation on Oct. 25th Mr. A. C. Rendle, B.A., Christ's, was admitted to the degree of M.D.; and Mr. E. Talbot, M.A. Trinity, and Mr. G. H. Hunt, M.A. Clare, were admitted to the degrees of M.B. and B.C.

THE LOCAL GOVERNMENT BOARD AND THE SMOKE OF BRENTFORD.—The Brentford District Council lately received a communication from the Local Government Board inclosing a report from the Coal Smoke Abatement Society. The report of the society contained particulars of the times during which nuisance had been caused by the Waterworks Company. A member of the Brentford District Council gave it as his opinion that this matter had already received sufficient attention at their hands as they had already received a report from their own inspector and had already stated that they were exercising a constant supervision. The clerk to the council suggested that the council should assume a firm attitude. They should state that the town was essentially a manufacturing town and that they were not disposed to enforce the Act strictly. "The Local Government Board," he suggested, "might do what they liked." We can hardly

suppose that the Local Government Board will be intimidated by the clerk of the Brentford District Council. Time will show.

BRISTOL MUNICIPAL ELECTIONS.—Mr. Colston Wintle, L.R.C.P. Lond., M.R.C.S. Eng., has been returned unopposed for the Horfield Ward of the Bristol Town Council.

THE SANITARY INSPECTORS' EXAMINATION BOARD.—The next examination for certificates of qualification for appointment of sanitary inspector or inspector of nuisances, under Section 108 (2) (d) of the Public Health (London) Act, 1891, will be held in London on Tuesday, Jan. 15th, 1901, and the four following days. Particulars will be forwarded on application to the honorary secretary, Mr. W. R. E. Coles, 1, Adelaide-buildings, London Bridge, E.C.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are announced:—Dr. Tomashevski, who was for 40 years director of the Nicholas Children's Hospital in St. Petersburg.—Dr. William Webb Browning, Professor of Anatomy in Long Island College Hospital, Brooklyn.—Dr. Maximino Teijeiro, Professor of Clinical Surgery in the University of Santiago, Spain.—Dr. H. H. McGuire, former Professor of Surgery in Richmond, U.S.A.—Dr. A. Stillé formerly Professor of Medicine in the University of Pennsylvania.

FREE HOME FOR THE DYING.—The dedication of the new and permanent building for the Free Home for the Dying, 29, North-side, Clapham-common, took place on Oct. 26th. The building, which was formerly the residence of the late Sir Charles Barry, has been transformed by Mr A. E. Street, who has himself made a donation of £100 towards the building fund. The purchase of the freehold and the cost of the alterations and repairs have involved an outlay of more than £10,000, and of this amount a sum of £3000 has still to be collected. It is hoped that the public will shortly relieve the institution of this debt. The Bishop of Southwark, who performed the dedication ceremony, in the course of his address stated that a munificent donation of £1000 had been given that day to endow permanently one of the beds. The building is well adapted for its purpose; it contains 25 beds, of which 12 are in the women's ward, eight in the men's ward, and the remainder in separate rooms.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.*

ANDERSON, J., M.B., C.M. Glasg., has been appointed District Medical Officer for the No. 5 Sanitary District, Sunderland Union.

BATHE, ALLAN ARTHUR, M.A., M.B. Oxon., has been appointed an Honorary Medical Referee by the Board of the Royal National Hospital for Consumption and Diseases of the Chest, Ventnor, Isle of Wight.

BROWN, H. C., L.R.C.P. Lond., M.R.C.S., has been appointed District Medical Officer, Dudley Union, vice J. Brown, deceased.

BUICK, JAMES, M.B., Ch.M. Glasg., has been appointed Certifying Medical Officer for the purposes of the Factories and Shops Acts, Melbourne, Australia.

CORBET, L. F., L.R.C.P., L.R.C.S. Irel., has been appointed Certifying Surgeon under the Factory Acts for the Killoughey Dispensary District in the Union of Tullamore.

GILLIES, SINCLAIR, M.D. Lond., L.R.C.P., M.R.C.S., D.P.H. Camb., has been appointed Official Visitor to the Hospital for the Insane, Parramatta, and the Licensed House for the Insane at Cook's River, Sydney, New South Wales.

GRANNUM, W. B., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed District Medical Officer, Luton Union, vice D. R. McArthur, resigned.

HAWORTH, JAMES, M.B., Ch.B., has been appointed House Surgeon to the Sunderland Infirmary.

HILL, ALFRED W., M.D. Brux., L.R.C.P. Lond., M.R.C.S., has been appointed Honorary Assistant Specialist to the Ear and Throat Department of the Adelaide Hospital, South Australia.

HOBBS, GEOFFREY C., M.R.C.S., L.R.C.P., has been appointed Resident Medical Officer to the Hampstead Hospital, N.W.

HUEY, J. J., L.S.A., has been appointed Medical Officer and Public Vaccinator for the Mexborough Sanitary District.

HUNT, J. S., L.R.C.P. Edin., M.R.C.S., has been appointed Medical Superintendent to the Dunwich Benevolent Asylum and Medical Officer for the Care, Supervision, and Inspection of Lepers at Stradbroke Island, Queensland.

JAQUES, A. S., L.R.C.P. Lond., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed District Medical Officer, Gateshead Union, vice A. Green, resigned.

KENNEDY, R. C. H., B.A., M.B., B.Ch. Dub., has been appointed House Surgeon to the Royal Isle of Wight County Hospital, Ryde.

KYLE, H. G., B.A., M.B., B.Ch. Oxon., has been appointed House Surgeon to the General Hospital, Bristol.

MACDOUGALL, R., L.K.Q.C.P. Irel., L.R.C.S. Irel., has been appointed Public Vaccinator for Rokewood, Victoria, Australia.

MCKEE, F. C., B.A., M.B., B.Ch., B.A.O. R.U.I., has been appointed House Physician to the Sunderland Infirmary.

MCSWEENY, M. S., M.B., Ch.B. Melb., has been appointed Public Vaccinator for Milawa, Victoria, Australia.

MERRYWEATHER, S. H., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed District Medical Officer, Horncastle Union, vice W. P. Simpson, resigned.

NEILL, CHANNING, M.B., Ch.M. Irel., L.R.C.S. Edin., has been appointed Medical Officer at Eidsvold, Queensland.

PITTS-TUCKER, F. A., L.R.C.P. Lond., M.R.C.S., has been appointe Medical Officer and Public Vaccinator to the Sutton Sanitary District, Ely Union.

PLATT, J. E., M.S. Lond., F.R.C.S., has been appointed Assistant to the Professor of Surgery in the Owens College, Manchester.

SCOTT, H. J. H., L.R.C.P. Lond., M.R.C.S., has been appointed a Member of the Licensing Court for the District of Scone, New South Wales.

THOROWGOOD, JOHN C., M.D. Lond., F.R.C.P., has been appointed Consulting Physician to the Royal National Hospital for Consumption at Ventnor, Isle of Wight.

TODD, D. B., L.R.C.P. Lond., M.R.C.S., has been appointed District Medical Officer, Westbury and Whorwellsdown Union, vice G. G. Parsons, resigned.

WASSELL, JAS. L., M.B., M.Ch. Syd., has been appointed Medical and Health Officer at Thursday Island, Visiting Surgeon to the Prison at that place, and Medical Officer for the Care, Inspection, and Supervision of Lepers detained in the Lazaret at Friday Island, Queensland.

WILLSON, RIVERS, Ph.D., L.S.A. Lond., has been appointed Surgeon to the Oxford Medical Dispensary and Lying-in Charity, vice Chas. Ballard, resigned.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BAGTHORPE ISOLATION HOSPITAL, Nottingham.—Resident Medical Officer for twelve months. Salary £100 per annum, with board and residence. Apply to the Medical Officer of Health, Guildhall, Nottingham.

BIRKENHEAD AND WIRRAL CHILDREN'S HOSPITAL, Woodchurch-road, Birkenhead.—House Surgeon for twelve months. Salary £100 per annum, with board, residence, and laundry.

BIRMINGHAM AND MIDLAND HOSPITAL FOR SKIN AND URINAR DISEASES, John Bright-street, Birmingham.—Clinical Assistant.

BRITISH HOSPITAL, OPORTO, PORTUGAL.—Medical Officer. Salary £15 per annum, with liberty to engage in private practice. Apply to the Treasurer, Mr. R. Coverley, 55, Rua da Reboleira, Oporto.

CARDIFF INFIRMARY.—Assistant House Surgeon for six months. Salary at the rate of £75 per annum, with board, washing, and apartments.

CORNWALL COUNTY ASYLUM, Bodmin.—Junior Assistant Medical Officer, unmarried. Salary £120, rising to £150 by £10 annually, with board, furnished apartments, &c.

DUNDEE ROYAL LUNATIC ASYLUM.—Medical Assistant.

FRENCH HOSPITAL AND DISPENSARY, 172, Shaftesbury-avenue, London.—Resident Medical Officer (not a female), speaking French, and unmarried. Salary £80 a year, with full board.

GUEST HOSPITAL, Dudley.—Assistant House Surgeon for six months. Salary at the rate of £40 per annum, residence, board, and washing.

HOLLOWAY SANATORIUM HOSPITAL FOR THE INSANE, Virginia Water, Surrey.—Junior Assistant Medical Officer for the male side. Salary £150 per annum, rising to £200, with board, lodging, washing, and attendance.

HOSPITAL FOR DISEASES OF THE THROAT, Golden-square, London.—Four vacancies for the office of Senior Clinical.

HOSPITAL FOR SICK CHILDREN, Great Ormond-street, London.—Ophthalmic Surgeon.

JENNER INSTITUTE OF PREVENTIVE MEDICINE, Chelsea Gardens, London.—Assistant in the Department of Pathological Chemistry. Salary £300.

KENT AND CANTERBURY HOSPITAL.—Assistant House Surgeon, unmarried. Salary £60 a year, with board and lodging.

KENT COUNTY ASYLUM, Chartham, near Canterbury.—Second Assistant Medical Officer, unmarried. Salary begins at £175 per annum, with board, quarters, washing, and attendance. Also Third Assistant Medical Officer required in January next. Salary begins at £125, with emoluments as above.

LEEDS GENERAL INFIRMARY.—Two House Physicians for six months. Board, lodging, and washing provided.

MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT AND CHEST.—Resident Medical Officer for the In-patient Department, Bowdon, Cheshire. Salary £100 per annum, with board, apartments, and washing.

NEWCASTLE-ON-TYNE DISPENSARY.—Visiting Medical Assistant for one year. Salary, first year, £160 and £180 afterwards.

PARISH COUNCIL OF TINGWALL, WHITENESS, AND WEISDALE.—Medical Officer. Salary £40 per annum, which includes the cost of medicine for paupers belonging to the parish. Apply to the Inspector of Poor, Scalloway, Shetland.

ROYAL DEVON AND EXETER HOSPITAL, Exeter.—Assistant House Surgeon for six months. Salary at the rate of £80 per annum, with board, lodging, and washing.

SALISBURY INFIRMARY.—House Physician, unmarried. Salary £75 per annum, with board, lodging, and washing.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN, Marylebone-road, London.—Surgeon to the Out Department.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, Plymouth.—Assistant House Surgeon for six months. Salary at the rate of £50 per annum, with board and residence.

SOUTHPORT CONVALESCENT HOSPITAL AND SEA BATHING INFIRMARY.—Resident Medical Officer, unmarried. Salary to commence at £150 per annum.

SUSSEX COUNTY HOSPITAL, Brighton.—Assistant House Surgeon. Salary £80 per annum, with board and residence. Also Resident Pathologist. Salary £70 per annum, with board and residence.

VICTORIA HOSPITAL FOR CHILDREN, Queen's-road, Chelsea, S.W.—House Physician for six months. Honorarium £25, with board and lodging in the Hospital.

WOLVERHAMPTON EYE INFIRMARY.—House Surgeon for twelve months. Salary £70 per annum, with rooms, board, and washing.

WOOLWICH INFIRMARY.—Resident Assistant Medical Officer at the Infirmary at Plumstead, unmarried. Salary £120 per annum, rising £10 yearly to a maximum of £150, with apartments, rations, and washing. The appointment subject to statutory deduction. Apply to the Clerk to the Board, Dispensary, Rectory-place, Woolwich.

Births, Marriages, and Deaths.

BIRTHS.

BURNS.—On Oct. 29th, at Wimpole-street, W., the wife of Theodore G. A. Burns, M.A. Oxon., M.R.C.S., of a son.

GASH.—On Oct. 22nd, at Auburn, Snodland, Kent, the wife of Thomas Gash, M.B., B.Ch., B.A.O., of a daughter.

HINDS.—On Oct. 26th, at Bexley House, Crayford, Kent, the wife of Thomas W. Hinds, M.D., of a son.

HANCOCK.—On Oct. 27th, at Hurst Green, Sussex, the wife of J. E. Hancock, L.R.C.P. Lond., M.R.C.S., of a son.

PATERSON.—On Oct. 24th, at Manchester-square, the wife of William Bromfield Paterson, F.R.C.S., L.D.S., of a son.

RAW.—On Oct. 21st, the wife of Nathan Raw, M.D., Liverpool, of a daughter.

ROBERTS.—On Oct. 27th, the wife of R. L. Roberts, L.R.C.P., M.R.C.S., of Highbury-hill, N., of a daughter.

STROUTS.—On Oct. 29th, at Week-street, Maidstone, the wife of Sidney R. Strouts, M.R.C.S., L.R.C.P. Lond., of a son.

MARRIAGES.

COLEMAN—STEPHENS.—On Oct. 24th, at the Church of the Ascension, Balham-hill, S.W., Maurice Were Coleman, M.B., of Reading, to Edith Annie Bowring, only daughter of Edward Bowring Stephens, of Upper Tooting, S.W.

FRENCH—ORTON.—On Oct. 24th, at the parish church, Hornsey, N., Gilbert Edwin French, M.R.C.S., L.R.C.P., of Thorn-croft, Chiswick, to Clara Geraldine, eldest daughter of Dr. Orton, Crouch-end, N.

SCOTT-JEFFREY.—At St. Enoch's Station Hotel, Glasgow, on the 29th inst., by the Rev. Robert Pollok, M.A., B.Sc., West U. P. Church, Irvine, Joseph Scott, M.B., C.M., Assistant Medical Superintendent, Government Indo-European Telegraph Department, Shiraz, Persia, to Sarah McKinnon, second daughter of Matthew Jeffrey, Irvine.

WALLACE—RUSSELL.—On Oct. 24th, at Wandsworth Congregational Church, Joseph Brownlie Wallace, M.B., Battersea-rise, to R. Marion (Daisy) Russell, younger daughter of Joseph Russell, Chestercourt, Heathfield-road, Wandsworth-common.

DEATHS.

ANDERSON.—On Oct. 27th, at Harley-street, William Anderson, F.R.C.S., Surgeon to St. Thomas's Hospital, aged 57.

CURRIE.—On Oct. 4th, at Maritzburg, Natal, Winifred Jessie, daughter of Oswald James and Sara Currie, aged seven months.

GALBRAITH.—On Oct. 24th, at Gladstone-place, Stirling, George Thomas Galbraith, M.D., Deputy-Inspector-General of Hospitals, in his 83rd year.

HAMPER.—On Oct. 28th, at Meeker, Colorado, C. Norman Hamper, M.D., C.M. Edin., formerly of Chislehurst, aged 32 years. (By cable.)

LAMPREY.—On Oct. 29th, at his residence, Portland-terrace, Southsea, Jones Lamprey, Surgeon-General (late) Army Medical Staff, aged 77 years.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

Notes, Short Comments, and Answers to Correspondents.

THE CHESTER HOSPITAL SCANDAL.

A GREAT to-do has been made at an inquest recently held at the Chester Infirmary concerning the death of a man named John Williams. He was admitted to the infirmary on Oct. 1st with an impacted fracture of the neck of the femur. He remained in the infirmary until Oct. 12th when he was removed to the workhouse where he died. The reason for his removal was that he was very noisy and dirty in his habits and disturbed the other patients. He could not be put into a ward by himself, as the Chester Infirmary has no separate accommodation for such cases. This narrative of events has been made the text for diatribes by the Chester coroner and by the *Manchester Evening Chronicle* of Oct. 23rd. The coroner is reported to have said that "if the man had been in a good position of life he would not have been sent to the workhouse. It was, in his opinion, simply due to the fact that he was a poor man and unable to pay for his board and lodgings at the infirmary that he was sent to the workhouse." The *Manchester Evening Chronicle* adds: "Surely further comment is superfluous." We do not think so. The same journal talks about the callous way in which the aged poor are handled in our hospitals. This charge, as anyone knows who is conversant with hospitals, is absolutely unfounded. As to the coroner's remarks (if they are correctly reported) they are foolish. If Williams had been well-to-do he would have been treated neither at the infirmary nor at the workhouse but at his own home by his own medical man. Every medical man knows that an impacted fracture of the neck of the femur in an old person (and Williams was over 70 years of age) should not be treated by keeping the limb rigid or the patient lying down. The house surgeon of the infirmary informs us that Williams was removed in a cab to the workhouse comfortably wrapped up, lying on pillows and a fracture-board. He was admitted to the workhouse on Oct. 12th and died on Oct. 19th. In our opinion the authorities of the infirmary did the best in their power both for Williams and for the other patients by removing him to the workhouse.

A QUESTION OF ETIQUETTE.

To the Editors of THE LANCET.

SIRS,—I shall feel greatly obliged if you will kindly give me your opinion as to the conduct of B in the following case. A, on receiving a message from people he had previously attended, visited the house and found a boy with symptoms of scarlet fever. There was no rash, but he had been ill only a few hours. The following day A was unable to see the boy, who lived two miles away. B was passing through the village and was called in. After examining the boy B was informed that A was attending, but in spite of this B notified the case as scarlet fever. The next day A made a special journey, and on arriving at the house was told that the boy had been removed that morning to the isolation hospital. A wrote to B for an explanation and received the following reply: "I much regret that the case of —— should have caused you any annoyance, but as I was called in to see the boy and the mother was anxious to have him removed as soon as possible I felt myself bound under the Act to notify the case and to ask the inspector to remove him without delay. The mother of the child did not tell me you were in attendance till after I had examined him."

I am, Sirs, yours faithfully,

Oct. 29th, 1900. MEDICUS.

*** B was asked for an opinion upon the case and gave it. He was not told anything about A's visit until after he had examined the patient. We consider that he did his duty by the patient, the patient's family, and the community by notifying the case. As B's diagnosis agrees—as we understand "Medicus"—with A's tentative view of the case, we cannot see how anything of an unpleasant nature can arise in the matter between two gentlemen of the same profession.—ED. L.

"MOTOR-CARS FOR MEDICAL MEN."

To the Editors of THE LANCET.

SIRS,—Your correspondent Mr. Claude A. P. Truman (*vide* THE LANCET, Oct. 20th, p. 1176) wisely refrains from giving his experience of motors *since* beginning with his "trike"; besides I do not consider a "trike" worthy of discussion as of use to a medical man by reason of its unsuitability and discomfort in wet or cold weather. If I have given myself away I am quite willing to restore myself to my own bosom by saying that I *do* deplore the condition of humanity as evidenced by full hospitals as I do full motor hospitals, but the two subjects are scarcely comparable, the one being an ancient and unavoidable evil, the other a modern question of practical utility. If the population of this country were reduced to 1000 and 800 were in hospital I should say that life would be scarcely worth living. Mr. Truman admits that cars *do* break down, and compares them with the vagaries of horses, but taking into consideration the enormous number of horses used for all purposes I maintain that the number of breakdowns due to them bears but a microscopic proportion to those due to motor

cars. I kept for nearly 30 years two horses and can honestly say that my accidents were infinitesimal. It is because perfection in motors is still so far off that I advised medical men to ponder—that is, if they want a machine for honest work. If they want it only for pleasure and possess a deep pocket, then by all means let them try any number of cars and shout when they succeed. Your correspondent "Motist" speaks the truth in saying "what a medical man wants in a motor is one that can be as easily controlled and managed in going from house to house as an ordinary horse and trap and not one made for speed." When this is on the market the utopian stage will set in. "Benz Car" seems to have been more fortunate in his experience, but it would be interesting to know how often his worries with tyres, chains, and wheels occurred, and what the "&c." implied? It also appears to me a pretty large order for the upkeep of one small car, between £30 and £40 annually. After all the question is one of cost and efficiency and I repeat my opinion that the motor up to the present time does not fulfil the requirements of a medical man for all-round work.

I am, Sirs, yours faithfully,

Oct. 22nd, 1900. MOTOR-CAR.

WANTED—A HOME.

DR. HERBERT HART, 101, Queen Victoria-street, E.C., is anxious to know of a comfortable home or an institution for a girl of weak intellect. Her father is willing to contribute *7s. 6d.* per week towards her maintenance. She is 15 years of age and when young she suffered from hydrocephalus. She has always been a dull child and although not exactly an imbecile requires to be under careful management.

THE DANGERS OF STRYCHNINE.

To the Editors of THE LANCET.

SIRS,—A young man, aged 27 years, was suffering from cardiac dropsy. He had, *inter alia*, considerable ascites, which had been tapped the day previous to Sept. 6th. On the morning of the 6th I gave him a hypodermic injection of strychnine, dissolving a tablet of one-sixtieth of a grain of sulphate of strychnine. My patient derived a great deal of benefit from the hypodermic injection. On the following morning at exactly the same time (10 A.M.) I repeated the injection. Half an hour afterwards I was sent for. I went immediately to find my patient in undoubted convulsions from strychnine poisoning. The muscles of the back and arms were chiefly involved. The terror-struck face, the prominent eyeballs, the dilated pupils, and cyanotic complexion formed a picture I shall not readily forget. I at once administered 10 grains each of bromide of potassium and chloral hydrate, with the result that the convulsions wore away into twitchings and finally ceased within an hour. The patient died seven hours afterwards, but, as far as one could tell, solely from his cardiac condition, for his death had been expected daily. Call it idiosyncrasy or what you will, I shall hesitate to use strychnine again in a similar case. The only medicine the patient was taking was five minims of tincture of digitalis every four hours in a teaspoonful of water. I am, Sirs, yours faithfully,

Oct. 30th, 1900. M.R.C.S.

P.S.—The wholesale chemists from whom the tablets were obtained have examined the tablets remaining in the tube and find the quantity of strychnine contained in each correct.

HOSPITAL ABUSE: A SIDE THAT IS SOMETIMES OVERLOOKED.

To the Editors of THE LANCET.

SIRS,—One cannot be a regular reader of your correspondence columns without seeing numerous complaints from the general practitioner about hard times and the ready explanation of this by the competition of general and special hospitals. Who is to blame for this? If the practitioner sends to hospitals every case from a tied tongue to a whitlow that cannot be met with the usual bottle of medicine he can scarcely grumble at other and more remunerative cases going to hospitals on their own initiative. I have recently had under my care at a hospital two instructive cases. One was a case requiring an abdominal section in a patient, sent in by her medical attendant, who told the matron very innocently that she had not wished to pay for her operation because she had just purchased an 80-guinea piano and desired to avoid more expense. Her daughter obtained reduced terms from another special practitioner because of the expense her mother's operation had entailed on the family. The second case was a urethral caruncle in a woman who lived in a superior street. In accordance with our rule a circular was sent to her last medical attendant stating that she had applied for treatment and inviting him to say whether the patient was a fit person to receive charity. This gentleman replied that he saw no reason to doubt her suitability. When the woman was dismissed from hospital her friends offered to pay any sum if we would retain her till it suited her convenience to return home. Such cases are constantly arising. Others occur where a practitioner sends patients into hospital and receives fees of five guineas and upwards, as we subsequently learn, for being present ("assisting") at the operation. Most hospital surgeons could furnish many similar instances of hospital abuse encouraged or instigated by general practitioners. I gladly acknowledge that it is the exception, but while such things occur it scarcely lies with the general practitioner to rail at hospitals for depriving him of a livelihood. I have yet to meet with the surgeon, hospital or otherwise, who is anxious to work for nothing or who would not be glad to receive patients before they have been drained of their fee-paying capacity by a long course of useless medical treatment. Let us be fair and face the facts. I submit that hospital abuse is as much caused by the general practitioner as by either the consultant or the public, and that, though it is heresy to say so, the hospital surgeon has as much right to a living as the general practitioner and as much right to the rewards of his work and reputation. Neither is he called upon to ask that gentleman's permission to exist at all, nor to do so on anything but the refuse of his practice or generous doles of patients of whom he is weary or who are weary of him.

I am, Sirs, yours faithfully,

Oct. 28th, 1900. A HOSPITAL SURGEON.

"CHRONIC INERTIA."

IN the Local Government Board report just issued Mr. Preston Thomas relates an amusing instance of laziness and vagrancy. A sturdy loafer repeatedly applied for relief on the ground of his inability to work, but he had not been able to induce a medical man to support his plea. He came, however, triumphantly at last with a medical certificate which testified to his being affected with "chronic inertia." He was surprised, not to say disappointed, that his application was again refused.

THE FEET OF CHINESE WOMEN.

DR. K. SMYTH of Ningpo writes as follows in *Mercy and Truth* with regard to the Chinese practice of foot-binding:—

"It is a remarkable fact that over 90 per cent. of the leg compound fractures we meet with occur in women. This must be attributed to the almost universal practice of foot-binding. The little Chinese girl's feet are perfectly natural in shape and size until the time of binding—usually the seventh year. Distortion then begins. A long bandage of cotton cloth, a few inches wide, is firmly applied in figure-of-eight form, and the tightness of the bandage is increased at intervals until the desired size is attained. The resulting distortion is as follows:—The tarsus or instep is bent upon itself, the heel bone is thrown out of the horizontal, its previously posterior surface becoming inferior, and the four smaller toes are pressed down under the sole, until, finally crushed and attenuated, they lie folded under the great toe. The process of footbinding—never a painless one as the native proverb testifies, 'For every pair of bound feet there is a rain-tubful of tears'—is excessively painful when the professional bandager does her work badly. In such cases caries, necrosis, or deep ulcer may follow, especially when the little victim inherits a strumous constitution. If, on the other hand, the binding is done evenly and well, pain soon subsides, and sensation in the foot becomes partially or wholly lost."

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Nov. 1st, 1900.

Date	Barometer reduced to Sea Level and 32° F	Direction of Wind.	Rain-fall	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min Temp.	Wet Bulb.	Dry Bulb.	Remarks at 8.30 A.M.
Oct. 26	29·35	S.	0·06	56	61	47	47	50	Overcast
,, 27	29·34	S.W.	0·18	87	54	40	45	48	Cloudy
,, 28	29·75	W.	—	79	55	40	45	48	Cloudy
,, 29	29·64	WSW	0·24	86	56	45	50	52	Cloudy
,, 30	29·34	W.	0·64	62	56	47	48	49	Raining
,, 31	29·97	S.	0·07	99	65	49	56	56	Cloudy
Nov. 1	29·80	S.	0·02	74	61	56	57	58	Raining

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (5th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M.).

TUESDAY (6th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M. and 6 P.M.), Royal Ear (3 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.).

WEDNESDAY (7th).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. George's (Ophthalmic 1 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), Cancer (2 P.M.)

THURSDAY (8th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.) University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), St. Mark's (2 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.).

FRIDAY (9th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M., Ophthalmic 10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M. and 6 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.).

SATURDAY (10th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (3.30 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (2 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), London Throat (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

TUESDAY (6th).—PATHOLOGICAL SOCIETY OF LONDON (Laboratories of the Royal Colleges of Physicians and Surgeons).—8 P.M. Laboratory Meeting. Dr. F. W. Pavy, Dr. R. L. Sian, and Dr. T. G. Brodie: Phloridzin Glycosuria. Dr. A. E. Russell and Dr. T. G. Brodie: On Cardiac Reflexes.—Mr. W. Edmunds: On the Results of Removal of the Thyroid in Dogs.—Dr. W. D. Halliburton and Dr. F. W. Mott: The Chemistry of Nerve Degeneration.—Dr. W. E. Dixon and Dr. T. G. Brodie: Further Experiments upon the Pulmonary Muscular Mechanisms.—Mr. A. C. Crouch: The Action of Chloroform upon the Heart.

WEDNESDAY (7th).—OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown by Dr. Giles, Mr. Noies and Dr. Hinds (introduced by Dr. Spencer), Mr. Blaud Sutton and others. Papers:—Dr. Croft: An Anomalous Case of Ectopic Pregnancy, probably Ovarian.—Dr. Lewers: A Case of repeated Ectopic Gestation in the same Patient, Laparotomy on each occasion.

THURSDAY (8th).—OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8 P.M. Cases and Card Specimens. 8.30 P.M. Papers:—Dr. W. E. Thompson: The Determination of the Influence of the Eyeball on the Growth of the Orbit by Experiments on Young Animals.—Mr. N. G. Bennett: Etiology of Lamellar Cataract.—Dr. F. W. Edridge-Green: Evolution of the Colour Sense.

BRITISH GYNÆCOLOGICAL SOCIETY (20, Hanover square, W.).—8 P.M. Specimens: Dr. R. T. Smith: Case of Degenerating Fibro-myoma.—Dr. Macnaughton Jones: (1) Case of Hysterectomy for Fibro-myoma; (2) Case of Broad Ligament Cyst.—Mr. C. Ryall: Case of Hysterectomy for Fibro-myoma. Short Communication: Dr. Macnaughton Jones: Notes of a Case of Salpingo-Oophorectomy. Paper:—Mr. R. Morison: Some New Methods in Pelvic Operations in the Female.

FRIDAY (9th).—BRITISH LARYNGOLOGICAL, RHINOLOGICAL, AND OTOLOGICAL ASSOCIATION (11, Chandos-street, Cavendish-square, W.).—4 P.M. Meeting.

CLINICAL SOCIETY OF LONDON (20, Hanover square, W.).—8.30 P.M. Papers:—Dr. N. Dalton: The Sequel to a Case of Hydatid of the Liver, showing also the Result of Abdominal Section on Ascites.—Dr. S. Wilson: On the Diastolic Cardiac Sound which causes Spurious Reduplication of the Second Sound at the Apex.—Dr. S. Phillips: A Case of Taromboasis of the Inferior Vena Cava and of the Iliac and Femoral Veins of Acute Onset and Fatal Termination, with Symptoms resembling those of Perforated Gastric Ulcer.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY (5th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. J. Pringle: Consultation. (Skin.)

TUESDAY (6th).—ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Dr. A. Garrod: The Urinary Pigments in their Pathological Aspects. (Bradshaw Lecture.)

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. R. L. Bowles: Consultation. (Medical.)

THE HOSPITAL FOR DISEASES OF THE SKIN (Stamford-street, Blackfriars).—5 P.M. Dr. P. S. Abraham: Eczema.

WEDNESDAY (7th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—5 P.M. Dr. C. Childs: Clinical Lecture.

LONDON THROAT HOSPITAL (204, Gt. Portland street, W.).—5 P.M. Dr. Cathcart: Impaired Movements of Vocal Cords. (Post-graduate Course.)

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton).—4 P.M. Dr. H. Mackenzie: Hæmoptysis.

THURSDAY (8th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. Hutchinson: Consultation. (Surgical.)

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond-street, W.C.).—4 P.M. Mr. Kellock: Demonstration of Selected Cases.

CENTRAL LONDON THROAT, NOSE AND EAR HOSPITAL (Gray's Inn-road, W.C.).—5 P.M. Dr. D. Grant: Diagnosis of Diseases causing Hoarseness or other Disturbance of Voice.

CHARING-CROSS HOSPITAL.—4 P.M. Dr. Green: Cases in the Wards. (Post-graduate Course.)

FRIDAY (9th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. H. Tilley: Consultation. (Nose and Throat.)

EDITORIAL NOTICES.

It is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICES.

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WILL Subscribers please note that only those subscriptions which are sent direct to the Proprietors of THE LANCET at their Offices, 423, Strand, W.C., are dealt with by them? Subscriptions paid to London or to local newsagents (with none of whom have the Proprietors any connexion whatever) do not reach THE LANCET Offices, and consequently inquiries concerning missing copies, &c., should be sent to the Agent to whom the subscription is paid, and *not* to THE LANCET Offices.

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The Manager will be pleased to forward copies direct from the Offices to places abroad at the above rates, whatever be the weight of any of the copies so supplied, Address—THE MANAGER, THE LANCET OFFICES, 423, STRAND LONDON, ENGLAND

During the week marked copies of the following newspapers have been received: *South Wales News, Evening Times (Glasgow), Science Siftings (London), Alliance News, Birmingham Daily Post, West Morning News, Daily Mail (London), Daily Express (London), Liverpool Daily Post, Blackburn Daily Telegraph, Bristol Times, Leicester Daily Post, Western Mail (Cardiff), Dublin Daily Express, Nottingham Daily Journal, East Anglian Daily Times, Redditch Indicator, Leeds Mercury, Oxford Chronicle, Sheffield Daily Telegraph, Dundee Advertiser, Manchester Guardian, Times of India, Pioneer Mail, Citizen, Scotsman, Rural World, Cambrian Times, Builder, Architect, Bristol Mercury, Mining Journal, City Press, Yorkshire Post, Local Government Journal, Reading Mercury, Surrey Advertiser, Hertfordshire Mercury, Australasian Medical Gazette, Sanitary Record, Chatham News, Brisbane Courier, Rangoon Times, Liverpool Courier, Edinburgh Evening Dispatch, Drogheda Advertiser, Brighton Record, Baptist, Jackson's Oxford Journal, Abingdon Herald, The Record, Church Gazette, Tropical Times, Huddersfield Examiner, Windsor Chronicle, Enfield Observer Church Family Newspaper, &c., &c.*

Communications, Letters, &c., have been received from—

A.—Dr. J. Adam, West Malling; Dr. J. H. Aston, Guatemala City; Mr. W. H. Ansell, Messingham; Messrs. Arnold and Sons, Lond.; Dr. H. de M. Alexander, Perth; Dr. Frank Arnold, Geelong, Rhodesia; Association for Pure Vaccine Lymph, Lond., Secretary of.

B.—Mr. E. B. Bennett, Margate; Dr. C. L. Birmingham, Westport; Mr. J. Bardsley, Manchester; Mr. B. R. Balfour, Drogheda; Messrs. Boulton and Paul, Norwich; Dr. E. Boix, Paris; Boscombe Hospital, Secretary of; Messrs. Burrough's, Wellcome and Co., Lond.

C.—Miss A. R. Cooper, Paignton; Miss E. M. Cuffe, Woodhall Spa; Dr. Harry Campbell, Lond.; Messrs. Cassell and Co., Lond.; Cardiff Infirmary, Secretary of; Mr. J. A. Colecliugh, Hindhead; Mr. E. A. Clarke, Dukinfield; Mr. W. H. E. Coles, Lond.; Messrs. Cuxson, Gerrard, and Co., Oldbury; Messrs. J. B. Clarke and Co., Birmingham; Messrs. J. and A. Churchill, Lond.; Clarke Co. (The), Lond.

D.—Mr. A. Duke, Cheltenham; Professor Delépine, Manchester; Mr. R. R. Dawson, Lond.; Messrs. H. Dawson and Co., Lond.; Derby County Asylum, Clerk of; D. P., Lond.

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I.—International Sleeping Car Co., Lond.

J.—Dr. J. Johnston, Bolton; Jenner Institute for Calf Lymph, Lond., Secretary of.

K.—Herr S. Karger, Berlin; Kent and Canterbury Hospital, Canterbury, Secretary of; Dr. H. R. Kenwood, Lond.; Mr. F. Kinton, Lond.; Mr. B. Kühn, Lond.

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